The Origins of Exercise Adherence in the Canadian Seniors Population

Karen Kilfeather, B.Ph.Ed., B.Ed.

Department of Graduate and Undergraduate Studies in Education

Submitted in partial fulfilment
of the requirements for the degree of
Master of Education

Faculty of Education, Brock University
St. Catharines, Ontario

Abstract

This research identified and examined the responses of 19 physically active seniors to determine why they were physically active. The participants were physically active seniors, from the Niagara region who participated in physical activity 2, or more times per week. The purpose to this research was to determine what specific experiences or characteristics those seniors' possessed which motivated them to follow an exercise regime in later life.

Three focus group interviews were conducted and participants responded to a set of predetermined questions. Responses to the interview questions were transcribed and analysed by comparing words and participant responses. This method of analysis is known as ethnographic summary. Themes, concepts, and experiences that emerged from the focus group interviews were also recorded according to systematic coding by way of content analysis.

From this study, factors that predispose, enable, reinforce and prevent seniors from participating in exercise have been identified. Nine recommendations for improving seniors quality of life have also emerged from the study. Additionally, the findings from the study illustrate that those responsible for planning programs for seniors need to consider senior's wants and needs. Finally, the study also has educational implications. All

participants in the study experienced a positive introduction to daily phyiscal activity through their school setting. Participants of the study believed, that their positive experiences at school, directly influenced their lifelong involvement in exercise.

Acknowledgements

To Dr. Lorne Adams for accepting the role of mentor and advisor in the writing of this thesis I would like to express my deepest gratitude.

My sincere thanks Dr. Maureen Connolly who assisted many times throughout the writing process; I deeply appreciate her generous sharing of both time and insight.

I also wish to acknowledge the help that was offered to me by the instructors at the Brock Faculty of Education.

Finally, I would like to thank the members of my support system at home for their patience and encouragement. Their faith made it possible for me to achieve my goal of attaining this degree.

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CHAPTER ONE: INTRODUCTION

We live in a rapidly aging society. In 1996, seniors (for the purpose of this study, seniors will be considered those aged 65 plus years) comprised 20.7% of the total population (Statistics Canada, 1997) As Canada enters the 21st century, the segment of the population aged 65 years or greater is expected to increase even further. By the year 2006 (Appendix D) seniors will number approximately 4.5 million people (Statistics Canada, 1997) In the second decade of the 21st century, the baby boom generation (those born between 1946 and 1966) will enter the seniors' population. This group will then further escalate in size, reaching an expected 6 million people in 2016 (Appendix F; Statistics Canada, 1997). Though demographers cannot say with certainty beyond 2016, a significant portion of the population is going to be classified as seniors in the next 20 years.

With such a significantly large percentage of the population aging, it will become increasingly important to help seniors maintain a high quality of life. From a purely economic point of view, in the future Canada as a country cannot provide the resources that have readily been available for such large numbers of seniors in the past. Already in Canada, the shift is away from the traditional, costly institutional-based care system to that of a more cost-efficient preventive care system. Seniors themselves will likely have to

take some personal responsibility for their level of health and fitness if they expect to have a high quality of life in their later years.

Studies have already suggested that frailty and weakness are major causes for deterioration in the quality of life that many people experience as they get older (Shephard, 1989). Also, older adults who are frail lack the power and strength to carry out the activities of daily life. The loss of strength in older adults is not entirely due to the aging process, but also to a lack of participation in activity. Current research has found that losses previously associated with aging are not due to the aging process, but actually due to lack of activity. Inactivity and weakness in people as they age are associated with increased risk of diabetes, heart disease, hypertension, and osteoporosis (Godfey & Feldman, 1984). However, the benefits of a more active lifestyle include increased levels of lipoprotein, diminished risk of colon cancer, lower body weight, diminished risk of osteoporosis, reduced blood pressure, improved psychosocial functioning, and an increased energy level. Currently, no single medication can compete with the range and pathology for which exercise is prescribed. It is prescribed in the treatment of obesity, depression, arthritis, hypertension, coronary heart disease, insomnia, migraine, smoking cessation, and most importantly for this study, in moderating the normal functional changes that occur in advancing age (Novak, 1993).

Unfortunately very few seniors actually engage in regular physical activity. Statistics on the percentage of seniors currently active varies from one study to the next. Novak (1993) found that less then 9% of people over 55 years of age take part in any intentional exercise program. Novak also contends that Canadians more than 65 years led the nation in time spent per day watching television, approximately 4 hours per day. Shephard (1989) found that only 1 in every 10 seniors engages in the recommended 30 minutes of vigorous activity three to five times per week. However, Statistics Canada (1997) claims that 53.7% of seniors aged 55 to 64 years and 46.8% of seniors aged 65 plus years exercise three or more times per week for a period of at least 15 minutes. Therefore, it can be concluded that much variability exists amongst studies.

Statement of Problem

When examining current literature on physically active seniors, there are great inconsistencies. Some studies indicate that most seniors are generally physically active (Statistics Canada, 1999), while other studies suggest that the majority of seniors do not participate in daily physical activity (Shephard, 1989). Therefore, it is concluded that while some seniors are physically active, others are not. These discrepancies in the research make it very difficult to predict with much accuracy why and how many seniors actually engage in

daily physical activity. In an attempt to understand, program, and advocate for seniors, currently active seniors need to be examined. The best way to obtain current, realistic information about physically active seniors is to see them and interview them. Consequently, this study examined physically active seniors in a focus group format (qualitative, information-rich group interviewing) to identify the specific characteristics and/or experiences of the small portion of the seniors population who are physically active and regularly engage in exercise. Once the characteristics of exercise adherence for Canadian seniors are identified in this study, it is hoped that they will be widely distributed in an attempt to encourage others to have such experiences or embrace such characteristics so they can also experience the benefits of participating in physical activity in advancing age.

Purpose of Study

This study examined physically active seniors in a focus group format to identify what specific experiences or characteristics those seniors possess which motivate them to follow an exercise regime in later life.

Rationale

By focusing on the physically active seniors' perceptions of why they remain committed to physical activity, it was hoped that these seniors would provide insight into how educators, health care providers, fitness and exercise

professionals, and all others who work directly/indirectly with seniors, can foster exercise adherence for aging adults. Considering the active senior's point of view and perceptions into the topic is extremely important, which is why the focus group format was chosen. Selected seniors provided first-hand accounts regarding their desire to remain physically active in later life, and whatever forces motivate and drive them to participate in exercise needed to be examined in greater depth. Research has already taught us that regular physical activity is a key component in healthy aging, but what remains unknown is why some seniors follow a regular physical activity regime while the majority choose not to.

Limitations

As with most research, this study has limitations. The only significant limitation of the study is the number of subjects. There were 19 participants selected for the study. They were chosen for the study because they engage in exercise two or more times per week and are therefore physically active. It should be noted that feedback generated from the participants was reflective of their experiences and attitudes towards activity and not necessarily reflective of all Canadian seniors.

Delimitations

In an attempt to have only the most information-rich subjects, focus

group members were screened before being selected to participate in the study. During the screening process it was clearly explained to participants how vital it is that they feel comfortable discussing the benefits of exercise and the role exercise plays in their lives. They must be able to contribute to the group discussion or their involvement in the study would not be pursued.

The sample was comprised of 19 participants. It was felt that such a small group of unique individuals would yield very useful and relevant information.

Assumptions

It was assumed that the seniors who were selected for the focus group would be very excited and enthusiastic about the benefits of exercise in later life and would provide some genuine insights into this topic for the researcher.

Secondly, it is assumed that the researcher's past experience as a participant in a focus group would provide guidance in the successful group facilitation and gathering of useful information.

Thirdly, participants in the focus group were purposefully selected. They were chosen because they fit the criteria necessary to participate in the study. The utilization of such information-rich cases allowed the researcher to learn a great deal more about the origins of exercise adherence and the benefits obtained from participating in physical activity in later life. Such pertinent

information cannot be gained elsewhere, and researchers such as Patton (1990) have explained the utility of purposeful sampling and the utilization of information-rich cases to answer research questions.

Finally, focus group members were very unique in that they were not only members of the seniors population but they were also physically active seniors. They were able to provide first-hand accounts of their experiences. The participants selected for the focus group are worthy of more in-depth study, and through their honest replies much was learned. It is hoped that what was learned will have a greater impact on what we know about the benefits of exercise for seniors and perhaps even the very way we promote physical activity in Canada.

Glossary of Terms

Aging: the patterns of life changes that occur in members of all species as they grow older. (Donatelle & Davis, 1996)

Focus groups: form of qualitative research where the researcher must analyzes interaction within the group based on topics that are supplied by the researcher, who takes the role of a moderator. The explicit use of the group interaction to produce data and insights that would be less accessible without the interaction found in a group (Morgan, 1988).

Senior: having reached the age of retirement. Older or an elder (Webster's, 1994).

Exercise: Physical activity at higher than normal levels of exertion (Donatelle & Davis, 1996).

Fitness: good physical condition, healthy; exercises daily.

Well-being: in a state of health, happiness, and good welfare.

Gerontology: The study of our individual and collective aging process.

Retirement: Withdrawal from one's position or occupation or from active paid working life.

CHAPTER TWO: LITERATURE REVIEW

The present study examined the origins of exercise adherence among Canadian seniors. The subject areas examined in the literature review were: (a) benefits of participation in exercise, (b) theories of aging, (c) definition and explanation of the focus group as a form of qualitative research, (d) current statistical data on Canadian seniors, and (e) the determinants of exercise.

Benefits of Participation in Exercise

An in-depth analysis of the current literature has resulted in the belief that the beneficial effects of exercise can be subdivided into two distinct groupings. The benefits of exercise are both physiological and psychological.

Physiological Perspective

Researchers agree that regular physical activity provides many health protective benefits to older adults (Sharpe & Mconnell; 1992, Stewart, King & Haskell, 1993). Most importantly, the onset of advancing age is not considered a limitation, and physiological improvements are known to result from only moderately intensive physical activity and exercise (Wolinsky, Stump, & Clark, 1995). Bokovoy and Blair (1994) suggest that with regular physical activity and exercise, health and physical fitness levels are maintained. Measurable increases have been documented over time in some older individuals. In short, it is thought that exercise alone can slow the aging

process by elevating and maintaining physiological functions at levels typical of adults who are decades younger.

Exercise also impacts one's heart. The incidence of heart disease amongst Canadians is rising. Currently heart disease is responsible for 2.1 million deaths annually. Active or physically fit seniors tend to develop less coronary heart disease than their inactive peer group, which directly improves their chances of longevity (Bokovoy & Blair, 1994; Lee & Paffenbarger, 1996).

Hypertension is generally referred to as consistently elevated levels of blood pressure. Hypertension is also a very serious medical condition that, if left undetected or untreated, can cause death. Participation in physical activity and exercise reduces systolic and diastolic arterial blood pressure by an average of 13 and 10 mm of mercury respectively in adults with mild to moderate hypertension (Bokovoy & Blair, 1994; Sharpe & Mconnell, 1992).

Participation in physical activity and exercise is also believed to prevent the onset of stroke. Stroke is a general term for a wide variety of serious conditions, sometimes referred to as cerebrovascular accidents or CVAs, caused by blood vessel damage in the brain. Bokovoy and Blair (1994) and Paffenbarger and Lee (1996) believe that activity and fitness may protect against stroke, but also suggest further studies need to be conducted to prove

the hypothesis.

The incidence of non-insulin dependent diabetes mellitus (NIDDM) is also proven to decrease as energy expenditure is increased from less then 500 kcal to 3,500 kcal per week amongst seniors (Bokovoy & Blair, 1994; Paffenbarger & Lee, 1996) . Findings such as the above further demonstrate the protective effects of physical activity.

The protective effects of exercise are not limited to just diabetes. Osteoporosis is the resorption of calcium from the bone caused by the inability of the body to use dietary calcium and is often diagnosed in seniors, especially postmenopausal women. Physicians often prescribe exercise as part of the treatment to prevent the onset of osteoporosis and treatment of fractures. One study using older women with a history of osteoporosis fractures found a 3.8% increase in bone density in women who performed simple resistance exercises compared to a 1.9% loss in a matched control group who did no resistance exercises over a 5-month period (Bokovoy & Blair, 1994). Therefore, exercise both prevents the onset of osteoporosis and assists in the treatment of fractures by strengthening bone density (Donatelle & Davis, 1996).

Seniors suffering from rheumatic arthritis are also believed to benefit from exercise. Sufferers of osteoarthritis and/or rheumatoid arthritis who participated in a supervised exercise program claimed they had improved

functional status, decreased medication use, and had a psychological boost from participating in group exercise (Bokovoy & Blair, 1994).

Perhaps the most compelling information about the benefits of exercise for seniors is that regarding mortality. Stewart, King and Haskell, (1993) found that participation in exercise and physical fitness has also been associated with reduced mortality rates in a large sample group of seniors. A sample group of seniors exhibited a reduction in death rates when levels of fitness were increased. In the famous Harvard alumni study, mortality rates decreased from 74.0 to 38.6 per 10,000 as energy expenditure increased from less then 500 kcal to greater than or equal to 3,500 kcal per week (Lee & Paffenbarger, 1996). Clearly, a relationship exists between physical activity level and mortality. Those who participate prolong the onset of the infirmities and disabilities of old age. Evidence is rapidly accumulating that physical activity can lengthen life by up to 2 years (Novak, 1995).

Finally, from the physiological perspective, researchers agree that participation in physical activity and exercise increases muscular strength, flexibility, mobility, functional status, general fitness levels, functional capacity, and has desirable effects on body weight (Paffenbarger & Lee, 1996; Sharpe & Mconnell, 1992; Swoap, Norvell, Graves & Pollock, 1994; Wolinsky, Stump & Clark, 1995). For seniors, exercise can not only increase

length of life but also quality of life. In fact, no single group can benefit more from exercise than the elderly.

In summary, losses which were previously associated with advancing age may not be a result of time passage, but of disuse (Hales, 1992). Therefore it can be concluded that, just as inactivity accelerates aging, activity slows it down.

Psychological Perspective

Physical activity and exercise are often prescribed for those suffering from depression. Further, there is widespread belief amongst researchers and health care practitioners that the incidence of depression is significantly reduced amongst seniors who engage in regular physical activity (Bokovoy & Blair, 1994). Further studies need to be conducted in this area to prove this hypothesis. It should be stated that many believe there is a relationship between physical activity and reduced incidence of depression amongst seniors.

Physical activity and exercise are also excellent ways to reduce stress. Seniors who regularly engage in physical activity and exercise also believe that participation enhances their confidence and improves their mood (Stewart, King & Haskell, 1993). Swoap, Norvell, Graves and Pollack (1994) also claim that exercise facilitates other positive psychological changes in older adults, such as a sense of accomplishment from mastering a task, providing a

distraction form outside stress, assisting in obtaining an improved body image, and providing benefits from the social interaction of the group.

Arbuckle, Gold, Chaikelson and Lapidus (1994) hypothesize that participation in physical activity contributes to the maintenance of cognitive abilities in late adulthood. They believe that optimal competence, psychological health, and well-being are derived from continually involving oneself in challenging activities that place high demands upon adult abilities. Presently, a small but significant relationship has been identified between one's level of activity and their cognitive abilities, but due to a lack of appropriate measuring device, further research and study are necessary before the relationship between activity and maintenance or improved cognitive ability amongst seniors is accepted.

Theories of Aging

Many theories exist regarding aging. Each theory provides insight into both societal and personal expectations surrounding aging. While some theories perceive aging favorably, others take a very pessimistic and negative view of the inevitable life process of aging. For the purposes of this literature review, the most commonly accepted theories will be examined. Two types of theories will be presented: specific and general theories. Specific theories include disengagement, activity, continuity, age stratification, and ageism.

General theories include genetic theory, damage theory, and the gradual imbalance theory

Specific Theories

Disengagement Theory. According to disengagement theory (Cumming & Henry, 1961 cited in Novak, 1993) old age is a time of withdrawal from social activities and physical activity. Theorists believe disengagement is inevitable, universal, and satisfying to both the person and society, as many seniors believe it is expected that they slow down or cease to work or exercise strenuously. Disengagement theory encourages older adults to reduce their activity gradually as their strength level declines. Disengagement theory also encourages older adults to reduce or eliminate their social roles before entering their final disengagement, death (Novak, 1993).

Activity Theory. Activity theory (Neugarten, Havighurst, & Tobin, 1968 cited in Novak, 1993) is considered to be the exact opposite of disengagement theory. According to the activity theory, as people lose social roles in advancing age, they remain happiest when they replace lost social roles with new roles. These theorists believed happiness comes from work and activity. Results of this type of research have found that active people fit into one of three categories. The first type of active people were referred to as "re-organizers". The "re-organizers" engaged in new activities to fill in for lost

roles and activities. The second group of people were characterized as "holding on". The "holding on" group maintained their midlife roles and remained active. The third group of active people were referred to as "focused". The "focused" group stayed active but narrowed the scope of their activities and became very specific about which activities they choose to engage in (Novak 1993).

Continuity Theory. Continuity theory (Atchley, 1982 cited in Novak, 1993) suggests that people feel most satisfied if they continue to act as they did in their middle years, for example, continuing with their daily roles and activities. According to Atchley, old age is a continuation of a persons' past and people will likely choose a lifestyle in old age that is most similar to the life they led in middle age. Therefore, a person who has led a sedentary or an active life, according to this theory will continue to do so in old age (Novak 1993). This theory poses less of a problem for an active person than for the sedentary inactive person, as the active one will likely continue with his/her healthy habits, while the destructive habits of the sedentary individual will in all likelihood continue.

Age Stratification Theory. According to the age stratification theory (Riley, 1971 cited in Novak, 1994) society expects certain behaviors from people at each stage of the life cycle. For example, the majority of young

people begin driving in the teenage years, marry in their 20s, and retire at age 65. This theory types or categorizes people by age and believes that older people should relax, retire, and enjoy leisurely activities (Novak, 1994). Theorists believe that society changes as people change. The societal expectations of seniors in the 1960s were different than the societal expectation of seniors living today in the 1990s. Age stratification theory creates a delicate balance between individuals and societal structures. Further, if a large number of people enter retirement (i.e., baby boomers) whose interests include maintaining their health and engaging in fitness activities, changes in traditional thinking will likely occur. Specifically, age stratification theory assumes that societal values and norms will affect individual aging. Age stratification theory reflects the relationship between the individual and society as they constantly influence each other. Finally, age stratification theory views society as a homogeneous set of structures and functions that all people experience in the exact same way.

Ageism. Ageism is a process of systematic stereotyping and discrimination against people because they are old. It is a damaging form of prejudice against individuals who are old in chronological age (Spirduso, 1995). Ageism occurs when society expects certain behaviors based primarily on chronological age. Ageism influences the use of chronological age to define

capabilities and societal roles. Ageism exists because young and middle-aged people feel disgust or distaste for the elderly. They view old age as a time of diminished physical and psychological capabilities, sickness, and dying. Ageism is based on stereotypes, myths, fear, and unfortunately influences old people themselves to behave according to the stereotypes.

General Theories

Genetic Theories. Genetic theories and their supporters claim that the entire aging process, from birth to death, is predetermined by our genes. Age-related events such as puberty, menarche, and menopause are preprogrammed into the biological clock of each cell. It is believed that life span, in addition to other age-related events may be controlled by one or more genes (Spirduso, 1995). Theorists believe one or more genes control and dictate cellular aging within the cell and adhering to a healthy lifestyle will not change or prolong life, as lifespan is already determined according to one's genetic make-up.

Damage Theories. Damage theories are based on the premise that chemical reactions that occur naturally in the body result in the production of irreversible defects in the molecules of the body. Additionally, daily chemical damage (varying in size) can occur from the breathing of air, the food consumed, tobacco inhaled, or from products of the body's own metabolism

(Spirduso, 1995). Supporters of this theory believe that, if chemical damage could be minimized, the aging process could be slowed and people would live longer. Basically, the constant exposure to damaging chemicals will result in the body's repair system becoming either overwhelmed or less effective with aging. Eventually system failure will occur. Therefore, if the aging process is to be slowed, if the system is not to become overwhelmed or less effective, exposure to harmful chemicals in the atmosphere (not specifically identified) must be reduced.

Gradual Imbalance Theory. Gradual imbalance theorists claim that the brain, the endocrine glands, or the immune system gradually fail to function, and failure may occur at different rates for different people (Spirduso, 1995). This is not preventable. The aging of different systems at different rates causes an imbalance among the systems as well as a reduced effectiveness within each system. It is believed that the failure of the various systems leaves older individuals vulnerable to a variety of diseases and eventually causes death. The failure of systems occurs throughout life, but the incidence of system failure increases with age, suggesting system failure is as inevitable as death itself.

Definition and Explanation of the Focus Group as a Form of Qualitative Research

Focus groups are a form of qualitative research where the data are collected through group interviews. Participants are selected because they have certain characteristics in common that relate to the topic under investigation. Focus groups are generally comprised of 7 to 10 participants. The researcher analyzes the interaction within the group based on the topics that are supplied by the researcher. The researcher is responsible for leading the discussion by asking questions and facilitating group discussion. Discussion that occurs becomes the data that are later transcribed and analysed to provide insight into why certain opinions are held by participants relating to the topic of interest (Krueger, 1988; Morgan, 1988). In summary, a focus group can be defined as a group interview based on topics supplied by the researcher (Morgan, 1988).

The focus group is not a new research phenenomon. Robert Merton and his colleagues used focus groups to examine the impact of wartime propaganda efforts during World War II. The findings of Merton et al.'s research were published under the title The Focused Interview (1956), and within this work are the origins of the commonly accepted focus group procedures utilized today (Krueger, 1988). The origins of the focus group can

be found in sociology, but nearly all applications of focus groups are in marketing research. The use of focus groups in marketing research allows manufacturers to test the marketability of new products without financial risk. Focus groups also allow the producers, manufacturers, and sellers to understand the thinking, wants, and needs of the consumer. Focus group interviews are widely accepted and highly regarded within the field of marketing research because they produce useful results at reasonable costs. The utilization of this technique is growing at a slow but steady pace among other information seekers such as social scientists, evaluators, planners, and educators (Kruger, 1988). Kruger also believes it is a particularly appropriate technique to use when the goal is to explain how people regard an experience, idea, or event, consequently making it the obvious method for gathering insight into this field of inquiry, the origins of exercise adherence amongst seniors.

The use of a focus group is an effective form of qualitative research for many reasons:

1. It allows the researcher to familiarize him/herself with a new field.

2. It assists the researcher in the generating of a hypothesis based on insights provided by the focus group.

3. It allows the researcher to evaluate different research sites or

study specific populations.

4. It encourages the researcher to develop interview schedules and questionaries (a valuable skill).

5. Lastly, the focus group gets participants' interpretations of results from earlier studies or stereotypes that exist on the subject under investigation (Morgan, 1988).

Further, the focus group is also often used for accessibility, as it allows for an increased number of people to be reached at one time, which subsequently reduces costs.

The use of a focus group proves to be advantageous for the researcher for several reasons:

1. It allows the researcher the opportunity to observe a large amount of interaction on a topic in a limited period of time.

2. The researcher has control over the organization and implementation of the focus group session.

3. Participants provide genuine and relatively spontaneous responses regarding the topic under investigation.

4. Control over interactions is in the hands of the participants versus the researcher.

5. This type of exploratory research requires less preparation,

though some preparation is still necessary.

6. Focus groups are easy to conduct and can be done with relatively little cost incurred.

7. The focus group interview will likely produce useful data with little direct input or influence from the researcher.

8. In conclusion, the focus group is more controlled than individual discussions (Morgan, 1988).

For the purpose of this research, the focus group appeared to be the best format to collect data. However, criticisms do exist about the disadvantages of the focus group.

Critics of the focus group believe that it is useful only as a preliminary or exploratory tool, and that results must be verified by quantitative research. The focus group format of research has also been criticised for being unnatural, as it is limited to verbal behaviour and the interactions in the discussion groups are created and managed by the researcher. Critics believe many types of interactions cannot be re-created and the focus group lacks naturalism. Focus groups are also criticised for creating chaotic data collection, resulting in little comparability between groups. Focus groups generally produce less data than individual interviews with the same number of participants. Critics also claim that individuals might feel intimidated by group discussion and just

mirror the thoughts and opinions of others in the group. Therefore, one could question the validity of what the participants say. It is also thought that the researcher has less control over the generated data versus the control level the researcher has in individual interviewing. Finally, the goal of the focus group is to facilitate a group discussion that resembles a lively conversation amongst friends, but if the participants do not know enough about the subject, the researcher may only collect pieces of relevant data (Morgan, 1988).

Clearly, the focus group is a dynamic and multifaceted form of qualitative research. It requires careful planning for its successful execution if the researcher is to obtain the desired data from the participants. Researchers Watts, Brockschmidt, Sisk, Baldwin, and McCubbin (1997) identified some important focus group considerations in their article "Use of Focus Groups to Determine the Need of Health Promotion and Wellness Education Services in Rural Communities". Watts et al. suggest that:

1. participants represent a cross-section of the community.

2. The researcher sets a date and time for the session that is convenient for focus group participants.

3. The researcher contacts each member of the focus group once they have been selected to personally answer any questions and further outlines to them the vital role their commitment and attendance plays in the

gathering of the research.

4. During focus group interviews the researcher should emphasize to participants that there is no right or wrong answer to any of the questions, and they may disagree with others opinions.

5. The researcher should inform participants that the session is being audio-taped due to the need to have a complete record of comments. The identity of participants should be concealed in all subsequent writings.

6. The researcher should prepare name tags for participants so they can properly address each other.

7. The researcher should be prepared to intervene if one member dominates so all members may contribute their thoughts and opinions during the discussion.

8. The researcher should attempt to identify participants who would be good candidates for follow-up research if necessary.

9. Finally, the researcher should make sure to reflect after the focus group session is complete and identify the major outcomes of the session. It is also advised that the researcher allow for time off between the focus groups to ensure the major themes that emerged from the discussion have been completely analysed.

Exercise Adherence

Exercise adherence literature tends to focus on the determinants or constraints that prevent people from participating in physical activity. From the identified determinants or constraints, strategies to overcome these barriers are presented. Therefore, current sources were examined pertaining specifically to older adults and exercise adherence. Frequently identified constraints and the suggested strategies to overcome these barriers for older adults are presented. It should be noted that the constraints identified by older adults are unique and therefore different than those identified by children, youth, young adults, and the middle aged.

Henderson (1991 as cited in Whaley & Ebbeck, 1997) defines constraints as "anything that inhibits a persons' ability to participate in leisure services, or to achieve a desired level of satisfaction" (p.366). Therefore, a constraint can be thought of as anything (real or perceived) that prevents one from participating in activity. Whaley and Ebbeck (1997) examined a sample group of seniors to identify their perceived constraints to participation in structured exercise classes. Data were collected through individual interviews. Analysis of the interviews revealed five commonly cited reasons for not participating in exercise classes. Reasons are listed from the least to most frequently cited responses. (5)Exercise is work, (4)the structured classes are

inconvenient, (3)too busy all the time, (2)suffer from health related problems, and (1)receiving exercise elsewhere. Other reasons for not participating included self-consciousness, lack of motivation and the feeling that activity is unproductive. For example, many older adults thought exercise should produce something tangible for their efforts. There was a widespread belief that exercise was an indulgence, or useless.

Based on the data collected from the individual interviews, researchers made suggestions to be implemented if seniors are to attend structured exercise classes. Suggestions for greater adherence and participation in exercise classes include: (a)increase the variety of programs offered to seniors (not just low impact aerobics), (b)provide greater flexibility in scheduling and (c)create opportunities for exercise partners (combining two people with similar interests together) to motivate and provide encouragement and support for one another (Whaley & Ebbeck, 1997).

Mills, Stewart, Sepsis, and King, (1997) followed a more general approach to examining seniors and exercise adherence. They studied a large sample of older adults to reveal their preferences for format of physical activities, or the types of activities they prefer to engage in. Mills et al.(1997) believe that various factors affect an individual's decision to adopt or maintain being physically active. These factors include age, gender, ethnicity, education,

income, lifestyle practices, health status, self-efficacy, and attitudes regarding exercise and social supports.

Mills et al. (1997) found through extensive research that if one wants older adults to maintain or engage in physical activity, older adults should be allowed to participate in activities they enjoy to maintain their interests. Second, participants should be allowed to select the form and intensity of physical activity versus assigning individuals to specific classes (such as low impact aerobics or stretching). Third, older adults preferred activities they could do alone or at home. Therefore, health promoters and those responsible for organizing fitness and exercise programs for older adults should provide greater awareness, encouragement, and resources for those who prefer individual activities.

In summary, Mills et al.(1997)found that a significant number of older adults prefer participating in individual activities versus formal exercise class settings and they want to participate in activities which they prefer and have an interest in.

Smith and Storandt (1997) conducted a study using 246 participants whom they classified as either a competitor, noncompetitor, or a nonexerciser. Participants completed a questionnaire which revealed why they participated or chose not to participate in physical activity. Researchers found that

competitors exercised because they believed regular exercise was important and improved one's health. Other reasons cited for participating by competitors included improved appearance, participation assisted in preparation for competition, to be with friends, to feel better physically, to reduce stress, to meet a goal, and finally, to improve mood.

Interestingly, Smith and Storandt (1997) found that master athletes (competitors) do not appear to be unique in terms of their participation in sports in early life. During the first and second decades of life, competitors, noncompetitors, and nonexercisers had similar experiences in sports during childhood and during the teenage years. Smith and Storandt believe that the critical period is the third decade and is an indicator of future exercise participation. Of those identified as competitors in Smith and Storandt's study, greater then 50% participated in sports and exercise during their 20s and 30s. It appears that if people incorporate sports and exercise into their lifestyle in the second and third decades, they will continue to do so throughout life. The third decade is the critical indicator of future practices, as most people have completed school, making it more challenging to get to facilities and find others to exercise with. Also, most people have begun to focus on careers and families, which makes it a very busy time.

This summarizes the current literature available on older adults and the

factors that both deter and encourage them to participate in physical activity. It should prove to be interesting if the participants in the focus group identify the third decade of their lives as a critical period during which they intentionally choose to engage in physical activity, or if they had always been active since childhood which carried over into adult life.

Statistical Data on Canadian Seniors

To gather the most current statistical data on Canadian seniors, Statistics Canada was referred to. Statistics Canada is a branch of the government that is responsible for gathering data from census, and making their findings available to the public. The data were down loaded from the statistics Canada web page on the Internet and is the most current statistical information available on Canadian seniors.

Appendix A, Exercise Frequency, by Age Group, by Sex, 1996-1997 presents some pertinent information (Statistics Canada, 1999). First, a total of 3,416,108 male and female seniors participated in a survey about their exercise habits. Approximately 49.6% or 1,694,229 of the participants claimed to exercise regularly. Approximately 12,1% or 413,449 of the senior participants claimed to exercise occasionally. Finally, the remaining 1,089,781 or approximately 31.9% of the participating seniors admitted to rarely exercising.

Examining the specific percentages of participation frequency for each gender in the 65-plus years category also proves to be insightful. A sample of 1,478,675 males aged 65 years and older were divided into one of three categories based on their responses. Approximately 52.7% or 779,900 of the male participants claimed to exercise regularly. Roughly 12.0% or 177,997 of the male seniors claimed to exercise only occasionally. Finally the remaining 395,463 or approximately 26.7% of the male seniors who participated in the survey admitted to exercising less than once per week or never.

Findings were similar for the female seniors. A total of 1,937,432 female seniors participated in the gathering of information on female exercise frequency. The female participants were divided into 1 of 3 categories. Categories were identical to the above mentioned. Approximately 47.2% or 914,329 of the female seniors reported exercising on a regular basis. About 12.2% or 235,451 of female seniors reported exercising only occasionally. Finally the remaining 694,318 or approximately 35.8% of the participants admitted to rarely exercising.

For both genders, those who exercised only occasionally comprised the smallest group, with 12.0% males and 12.2% females respectively. Most doctors, health promoters, and fitness professionals agree that to obtain the benefits of exercise, one needs to exercise vigorously three to five times weekly

for at least 30 minutes. If the 26.7% males and the 35.8% of females surveyed that admit to rarely exercising are reflective of the entire Canadian senior population, the numbers of seniors not exercising is cause for alarm. If such significant numbers of seniors continue to avoid exercise, their impact on demands for services, products, special programs, and health care will further increase health care cost and be devastating to the economy. Future unfit seniors will most definitely affect the economy, especially when one considers that the percentages of seniors in Canada is continuing to increase.

Appendix B, Population by Sex and Age, 1996 and Appendixes, C, D, E, and F, Population Projections by Age Groups and Sex, 2001, 2006, 2011, and 2016, (Statistics Canada, 1997) illustrate that the 65 years and over category is expected to increase steadily over the next 20 years. Growth is expected to continue to 2016. Beyond 2016 demographers cannot predict specific growth projections with much accuracy. As mentioned above, by the year 2041, 23% of the total population will be 65 or more years of age.

According to Appendix B, Population by Sex and age, 1996, there were a total of 3,642,169 seniors in Canada. By year 2000 (Appendix C), demographers project the number will increase to 4,030,700 seniors in Canada. In year 2006 (Appendix D), the population of seniors is expected to increase to 4,399,200. In year 2011 (Appendix E), the population of seniors

is expected to further increase to 4,981,200. By year 2016 (Appendix F), seniors in Canada are expected to number 5,894,300. It should be noted that in every age category beyond 65 years, women are expected to outlive men, and there may be as many as three times as many women as men in certain age categories.

In summary, the total number of seniors in Canada is increasing and will continue to increase for the next 20 years and beyond. Women are expected to continue to live longer than men. Though demographers cannot say with certainty beyond 2016, a significant portion of the population is going to be classified as seniors in the next 20 years. Providing the necessary supports, if we continue with an institutionally based health care system, will undoubtably be economically very demanding on citizens and result in an increasingly large deficit. Therefore, if currently physically active seniors can give insight into why they choose to be physically active or remain active, these findings can be widely distributed and may even result in a total rethinking and restructuring of how we teach, market, and promote the benefits of fitness, health, and physical activity in the future.

CHAPTER THREE: METHODOLOGY

Overview

The intent of this study was to examine physically active seniors to determine: (a)when they began exercising, (2)why they exercise, and (3)the beneficial impact exercise brings to their lives. After an intense literature search, it appears that the majority of literature on seniors and activity is actually researchers speaking of behalf of seniors. Therefore, it is very out of context. By intentionally examining physically active seniors, the study reflects the insider's (active seniors) point of view. This should prove to be very powerful, as the findings will speak in the seniors' own voice and not be hypothetical generalizations, suggestions or findings.

Description of Research Methodology

The answers to these questions will be examined in a focus group format. A detailed explanation of the focus group was outlined in the literature review. Focus groups consisted of not more then 6 seniors. A total of three focus groups were conducted. Focus group interviews were held in a neutral location (Brock University classroom). Interviews were audio-taped. Then the focus group discussions were transcribed. A summary of the finding from the discussions were then distributed to the participants. Participants verified that the summary was reflective of the findings of the focus group

discussion that they attended.

The design of this research, format of data collection, and data analysis strategies reflect the features or characteristics of a naturalistic inquiry of qualitative research (Patton, 1990).

Selection of Interviewees

Potential interviewees were initially addressed at their fitness class. Interested participants then provided the researcher with their name and home phone numbers. The researcher also provided potential interviewees with a brief description of the desired attributes or profile of persons suited to participate in the study (Appendix G). Interviewees were required to fit the outlined criteria: They must be a senior (55+ years) who exercises two or more times per week, believes they have benefited from exercise, and can openly discuss why they began exercising and how exercise has improved their quality of life.

Interviewees are also examples of extreme or deviant case sampling. Extreme or deviant cases are rich in information because they are unusual or special in some way (Patton, 1990). As suggested by Shephard (1990), only a small segment of the senior population engages in physical activity on a daily basis. Therefore, the in-depth analysis of a small segment of seniors in the Niagara Region who do participate in daily physical activity can be considered

extreme case sampling.

It is from these cases that the researcher can learn the most, and this is specifically why these cases were selected to participate in the study. The interview will be conducted from a set of predetermined questions, and the focus group interview lasted 1 to 1.5 hours (Appendix: H).

Three focus groups were utilized in the study. A total of 19 seniors between the ages of 55 and 84 participated in the focus group interviews. Focus group number one was comprised on 1 male and 6 females. Focus group number two was comprised on 1 male and 5 females. Focus group number three include 1 male and 5 females. Members of the focus groups had varied levels of education, disposable income and opportunities to exercise during their early adult years. However, all met the criteria for inclusion in the study.

Data Collection: Sampling Strategies: A Purposeful Sample.

This study was comprised of individuals whom the researcher believed could respond to the questions under investigation. Participants were selected to participate in the study because they are cases from whom the researcher may learn a great deal about the issues under investigation. The sample is therefore a purposeful sample (Patton, 1990). Participants were also considered information-rich cases because their similar experiences in physical activity would most likely yield fruitful data (McMillan & Schumacher,

1993).

Sampling of this type allows the researcher to get the perspective of the insider. Utilization of an insider allows the researcher the opportunity to obtain valuable information pertinent to the purpose of the research.

Analysis

After conducting each focus group interview, time was spent analysing the transcribed conversations from each session. Participants from each session were given a summary of the findings of the focus group. Each summary was different, as each focus group consisted of different subjects. Participants verified that the summary the researcher composed revealed the findings or feeling of the focus group discussion that they attended.

The data were analysed by comparing the words and responses of the participants to the predetermined questions. This method of analysis is better known as ethnographic summary (Morgan 1988). Themes, concepts, experiences, and outcomes emerged from analysis of the transcribed interviews and were recorded according to systematic coding via content analysis (Morgan, 1988). From analysis of the themes, concepts, experiences, and outcomes, specific answers to the initial questions that guided the study were uncovered. Further, recommendations, suggestions, and generalizations about seniors and physical activity were generated based on the findings of the study.

CHAPTER FOUR: FINDINGS

Two focus group data analysis techniques were used in this study: ethnographic summary and systematic coding via content analysis (Morgan, 1988). Morgan contends that additional strength comes from combining the two techniques.

Upon completion of the focus group interviews, all interviews were transcribed. From the transcribed interviews a summary of each individual interview was produced. Each participant of the study was sent a copy of the focus group summary of the interview that they attended. At that time they were given the opportunity to contact the researcher if they had any questions or concerns regarding the statements in the summary of their interview. Participants were also asked to sign and return a form that acknowledged that they had received and read the summary of the focus group interview that they had attended (Appendix I).

At this point the focus group interviews were examined together in what is generally referred to as a cross-content analysis. This cross-content analysis produced a list of common concepts. The identified common concepts were systematically coded according to the Influences on Personal Behaviour-Change Decisions Model (Donatelle & Davis, 1996). Therefore, common concepts from the participants' responses to the focus group

questions were classified as either: (a)predisposing factor or, (b)an enabling factor or, (c)a reinforcing factor. A predisposing factor would be described as a factor that would give one an inclination or tendency to exercise. An enabling factor would be described as a factor that gave one the ability, power, or means to exercise. A reinforcing factor would be defined as a factor that would strengthen one's desire to exercise. A fourth category was created, and the remaining common themes or categories were then described as barriers or challenges to health decisions and behaviours for seniors. Barriers or challenges are the specific factors that prevent seniors from exercising. Once common concepts or themes were in their appropriate categories, direct quotations from the focus group interviews demonstrated the participants' thoughts and feelings on the topics explored. Finally, any statements, findings, or claims by the researcher were backed up with literature from the literature review to establish the validity of the finding and the depth of research conducted.

The summaries of the individual focus group interviews follows.

Summary of Focus Group One

All participants began exercising during childhood via activities such as walking to and from school and playing unorganized games with other children. They regarded these experiences during childhood as very positive.

Participants viewed physical activity as a big part of their childhood entertainment, as televisions and computers were not as freely available as they are today.

At different life stages, time for participating in activity was limited due to employment obligations and the responsibilities of caring for young children.

All participants believe they have benefited from involvement in physical activity. They claim that they feel invigorated from exercise. They have also experienced some or all of the following benefits: improved strength, endurance, and flexibility, decreased stress levels, increased personal health, decreased incidences of depression, lowered blood pressure, decreased back pain, hip pain, and leg cramping, and for two specific participants, correction of an irregular heartbeat.

All participants agreed that resilience toward activity and being outdoors was built into individuals from their childhood experiences, the word resilience meaning that participants could easily begin activity and be outdoors because they possess a positive and flexible attitude towards both. Such an attitude is not a matter of chance or luck, but rather a result of their upbringing.

All participants believe that they are more active than others their age.

They recognize that they are in the minority in their neighbourhoods, walking and biking. They are also something of an oddity amongst their friends, family, and acquaintances. Participants did not think that they fit into the typical stereotype of a "senior."

Participants identified that exercise does not guarantee a longer life but that it adds to quality of life.

Participants considered themselves more healthy than others their age as they can do things others cannot.

Participants believe other seniors are deterred from participating in activity as they were not involved in sports and activity as children. Focus group members' perception is that for others to get involved in sports and activity later in life would take them out of their comfort zone and it would require too much effort. The initial aches and pain associated with beginning exercising would further deter them and they would not treat activity as a priority.

Participants felt that in the fitness industry there is a need for instructors who are seniors and instructors who are aware of the seniors' physical capabilities. Additionally, instructors must know how to push seniors to achieve their maximal effort level.

Participants are motivated to exercise daily as the things they want to

do require that they be fit. Daily exercise also improves their mental and physical alertness, helps in managing weight, and delays or prevents the onset of conditions such as osteoporosis and arthritis. Daily exercise also elevates moods, increases energy, increases mobility, and provides enjoyable social interaction. All participants agree that their quality of life has improved due to participating in exercise.

Participants had varying opportunities in physical education classes during their elementary school years. Some participants had lessons in sports such as gymnastics and basketball, while others had no formal physical education lessons. Two participants described negative experiences such as being forced to participate in a flexibility exercise where they were required to bring their legs over their head and being made to feel inferior to others due to their ability level.

On a typical day, participants engage in activities like walking, attending exercise classes, completing household activities such as cleaning and gardening, bicycling, weight training, golfing, hiking, and swimming.

Members of focus group one believe they are more active during warmer weather, except one participant who indicated that her activity level was the same year round.

To encourage other nonparticipating seniors to become active, focus

group members suggested they: (a)try an organized class specifically for seniors, (b)read testimonies about others who have benefitted from exercise, (c)just try it, (d)go with a friend, and (e)read or ask a physician about the specific medical findings regarding the benefits of exercise.

Active seniors also said that the format or style of current fitness centres needed revision. Card playing needs to be replaced with activity geared at improving quality of life.

Summary of Focus Group Two

Participants began exercising at varying stages in their lives. Some participants had been exercising since childhood, while others had begun exercising only within the last few months.

The majority of participants believed that they were active as school- aged children as physical education was compulsory in elementary school. Participants also believed that they did a lot of walking as children.

Participants explained that they began more formalized exercise since leaving the work force for any or all of the following reasons: to avoid weight gain, to improve health, to lower cholesterol and blood pressure levels, for social interaction with others, and to provide structure to their day, especially during winter months.

Life changes such as the responsibilities of young children,

employment, and relocation were responsible for disruptions or the cessation of formal structured activity during the participants' lifetime.

All participants believed they have benefited from involvement in physical activity. Participants claim they feel they have experienced any or all of the following benefits: improved physical strength, decreased pain associated with osteoarthritis, controlled weight management, improved flexibility, mood elevation, decreased arthritic pain in legs and hips, and lowered cholesterol levels.

Participants identified characteristics that motivate them to be active. Responses included: having an active partner, being a self-disciplined person, being a perfectionist who enjoys the opportunity to do better/more every time, being a person who becomes restless easily, and finally, being a person who values remaining healthy.

All participants believe that they are more active than others their age. They know this to be true as they can do more than friends, siblings, and other family members.

Participants had varied responses when asked to compare their level of health to their peer group. Four out of 6 participants characterised themselves as healthier than their peer group. One participant was working on improving her health, and one participant believed her level of health was similar to

friends due the fact that they suffer from similar health problems.

Participants believed other seniors are deterred from participating in exercise due to personal fear and embarrassment, lack of comfort with their level of fitness and personal appearance, dislike of exercise, and an inability to make a commitment to attend a weekly exercise class.

Participants felt that in the fitness industry there is a need for instructors who are seniors and instructors who are aware of the senior's physical capabilities. Additionally, instructors must also know how to push senior participants so they can achieve their maximal effort level.

Participants theorized that they are motivated to exercise to avoid or prevent the onset of family illnesses, to avert or prevent becoming ill, and finally, to evade the problems associated with high cholesterol.

For participants, daily exercise provides any or all of the following feelings: a positive sensation of doing something good for self, a good fatigue, and an improved life quality. Participants know they have an improved quality of life because they are happier and more conscious of things they eat and drink. They have embraced a healthier approach to living. They are not considering slowing down as they still have challenges that they want to accomplish. These challenges require that they be in good physical condition.

During the childhood and teenage years, participants had varied

opportunities to participate in formal organized activities due to events such as the war. One focus group member even lived in a displaced persons camp. Four focus group members recalled having lessons in football, swimming, basketball, baseball, and track and field.

All participants had opportunities while in school to participate in activities and sports in physical education classes. Four participants believed that the positive experiences in an educational setting were responsible for their lifelong involvement in activity and exercise. However, two focus group members did not enjoy their physical education classes at school.

During a typical week, focus group participants engage in activities such as completing household activities (cleaning and gardening), attending exercise classes, walking, cycling, bowling, babysitting, and working on home renovations.

Members of focus group two believe that they are more active during warmer seasons, with the exception of one member who is consistently active regardless of season.

To encourage other nonparticipating seniors to become active focus group members suggested they (a)try a class out. The structure of an organized class aids one in remaining committed, (b)ask others how their self-esteem and personal well-being has improved due to participation in exercise,

and, (c)obtain information about classes from community centres and through the newspaper. Focus group members also believe doctors and community leaders must begin to promote self-responsibility to seniors and that the media should begin positively portraying seniors in activity by televising events like masters sports competitions.

All members of focus group two claim that they feel younger than their chronological age.

All focus group members agreed that there is a need for more senior fitness instructors. Focus group members believe that senior instructors have a better rapport and a similar mentality.

Summary of Focus Group Three

Participants began exercising at various stages in their lives. One participant began exercising at 65 years of age, while other members of the focus group believed they began exercising during their teenage years or even before attending school. At such a young age, they were unaware that they were actually exercising.

Focus group members regarded these early experiences as positive. Participants remembered enjoying activity, and having mandatory physical education at school. The participants viewed physical activity as a big part of their childhood entertainment, as there was limited access to televisions. No

one had computers.

Participants recognized that during different stages of their lives structured exercise was inconsistent. Time for exercising was limited during participants' lifetimes due to events such as pregnancy, demands at school, caring for young children. Interestingly, focus group members identified that graduating from school resulted in fewer exercise opportunities.

Two focus group members always set aside one evening a week throughout their adult lives to engage in activities such as curling or volleyball with friends.

All participants believed they have benefited from exercise. They identified that they have experienced any or all of the following benefits: increased energy levels, better sleep, improved appetite, mood elevation, improved coordination and balance, enhanced agility, enhanced muscle strength, greater flexibility, and stress relief.

Participants were able to identify specific experiences that motivated them to exercise in later life. Experiences included: muscle and strength loss due to lack of use, back problems, weight gain, and family encouragement and support.

The majority of focus group members felt they were more active than others their age. They know this to be true as they have difficulty getting

friends to exercise with them, their siblings cannot do the same activities they can, and they see very few seniors in the community exercising and being active.

One focus group member believed all participants in the focus group were active, but could not claim to be more or less active than others her age as her friends are also quite active.

All participants believed that they were more healthy than others their age. They know this to be true by looking at other family members who are in poorer health or are troubled by aches and pains.

Participants believed other nonactive seniors are deterred from exercising as the majority of fitness instructors and participants are nonseniors. Therefore, the majority of classes cater to younger people. Such classes have a lot of high impact movements and loud music.

Participants are motivated to exercise daily due to the enjoyment they derive from it, the opportunity to socialize with others, the feeling of increased energy, and personal improvement in their level of health and fitness. Participants also claimed to be motivated to improve themselves and obtain the benefits of an improved quality of life. At the end of a workout participants described feeling relaxed, energized, fatigue (but a good fatigue), a sense of accomplishment, and mentally and physically challenged.

Overall, participants feel that engaging in daily activity has improved their quality of life. They feel they can undertake more. Participants recognised that things such as their cardiovascular strength had improved, their cholesterol levels have dropped, and they believe that they have stronger, healthier hearts.

Participants had varying opportunities as a child or teen to participate in formalized activities. Half of the focus group participated in formalized lessons in activities such as swimming, dancing, and gymnastics, while the remaining half did not.

All but one participant had physical education classes at school as a child. For the majority, physical education classes were mandatory.

On a typical day, focus group members engage in activities such as walking, hiking, cycling, skating, attending exercise classes, swimming, cleaning their homes and tending their gardens, and golfing.

Common Themes and Categories

The common concepts or themes in their appropriate categories are as follows:

Predisposing Factors

*Active seniors identified their lifestyle as active during childhood. For example, participants claimed they often walked 2 or 3 miles to school per day.

Participants also spent the majority of their time outside playing as children, weather permitting.

*The majority of active seniors considered themselves more active than the majority of their peers.

*Active seniors recognized that being in good health requires a level or degree of personal responsibility.

*For active seniors, activity was high on their list of daily personal priorities.

*The majority of active seniors regarded themselves as more active during warmer seasons.

*Active seniors used adjectives such as perfectionist, highly disciplined, and restless to describe themselves. They believed that such types of people are drawn to exercise due to the structure it provides in their daily lives.

*Active seniors are motivated to exercise daily because of their health. Being in good health is very important to active seniors.

*Currently active seniors' deliberate effort to exercise resulted from specific incidents such as an irregular heartbeat, back pain, stroke, hip pain, osteoporosis, high blood pressure, high cholesterol, and arthritis.

Enabling Factors

*Active seniors participate in a variety of physical activities on a daily basis, such as walking, swimming, biking, hiking, skiing, and yoga, due to the enjoyment they provide.

*For active seniors, physical activity in elementary school was compulsory. Formally organized extracurricular activities were not available to all participants at this age.

*Active seniors are motivated by an active senior instructor. Participants think if a member of their peer group can do something then so can they. They also claim to have a better rapport with someone their own age whom they perceive to have a similar mentality.

*Active seniors admitted to being more willing to be pushed by a senior-aged instructor than a 20- to 30-year-old.

*Most active seniors acknowledged that friends initially invited them to join their current programs.

*For active seniors, organized fitness classes provide structure to their day, and that has been a key to their success in committing to exercise daily.

*Active seniors participate in a variety of activities, in a variety of places. Their desire to exercise is not confined to their exercise class at Brock.

Reinforcing Factors

*Active seniors are motivated to exercise for the physical, psychological, and social benefits it provides.

*Participating in exercise allows seniors to do what they want to do, for example ride bikes, take hikes, swim, garden, clean their own homes, and enjoy being active with their young grandchildren.

*Active seniors claimed they feel young due to exercise. They do not feel their chronological age.

*Active seniors all agreed that exercise does not lengthen life span, rather, it adds to its quality.

*For active seniors, the importance of daily exercise has expanded or carried over into other areas of their lives. For example, active seniors claimed they are very aware of what they consume on a daily basis, and consequently they avoid certain foods.

*All active seniors experience positive benefits, both physical and psychological in origin, from daily activity.

*All active seniors considered themselves more healthy than their peers. They believed this to be true because they had less incidence of illnesses.

*Currently active seniors' deliberate effort to exercise resulted from specific incidents such as an irregular heartbeat, back pain, stroke, hip pain,

osteoporosis, high blood pressure, high cholesterol, and arthritis.

Barriers or Challenges to Health Decisions and Behaviours.

*During their early-to midadult years, when their children were young, many currently active seniors did not have the opportunity to attend formal exercise programs. They believed they were too busy working and caring for young children. Interestingly, many were too busy to pursue their own fitness and exercise needs as they were coaching or driving their own children to various sporting activities.

*Active seniors believed that if people sat along the sidelines as children, they became comfortable there, and that is where they have remained throughout their lives.

*Loud music, high-impact movements, and a young instructor were identified as deterrents to older adults who attempted to participate in exercise classes.

*Active seniors considered young fitness instructors as knowledgable, but thought that such instructors could not empathize with seniors because they were not seniors themselves.

*Active seniors theorized that a younger instructor cannot identify with their abilities.

*Active seniors suspected that the fear of trying new things and the leaving of one's comfort zone prevents many of their peers from participating in formal

exercise programs.

*Active seniors believe that to get other inactive seniors exercising, more information needs to be available to them about the beneficial effects of exercise.

Predisposing Factors

When focus group members were asked at what stage in their lives they began exercising they all characterised their lifestyle as active during childhood. Typical responses included:

"I have been exercising for so long, I can't remember. I was a girl."

"As a child I walked 2 to 3 miles to school everyday."

"Very young. I was not even aware of the fact that I was exercising but I was always either riding a bike, roller skating or swimming."

"Forty-five years ago people didn't have cars like today. Parents didn't give kids rides, so you walked everywhere."

Comments from focus group members are in keeping with what current literature claims about exercise habits and patterns. In fact, continuity theory (Atchley, 1982 cited in Novak, 1993) contends that people feel most satisfied if they continue to act as they did in their middle years. This would mean that they continue with their daily roles and activities regardless of advancing age. Old age is simply a continuation of a person's past. Focus group members had

a self-professed, active childhood. This initial lifestyle likely led to an active middle age and therefore, logically continues into their senior years. Based on the comments of the focus group members, the childhood experience had an influence on the type of senior that person became.

Focus group members were asked to compare their activity level to the activity levels of their peers. The majority of focus group members considered themselves more active than the majority of their peers. They proved this claim by making comments such as:

"The reason that I believe that to be true, if I say I'm going to do a particular thing like skiing or whatever, some people even say to me, 'why don't you act your age'?"

"Within your own family it is very obvious. Siblings younger than I say, 'I can't do anything'. It is true, if you don't use it, you lose it."

The above all indicate the damaging role that self and societal expectations play in discouraging the senior to be active. As found by Riley (1971, cited in Novak, 1994) in her theory of age stratification, society expects certain behaviours from people at each stage of the life cycle. This theory types or categorizes people by age, and many are adhering to the stereotypes that older people should relax, retire, and enjoy leisurely activities. This theory also holds that society is homogeneous, and that all people experience it

in the same way. Clearly, participants in this study are not falling into the stereotyped categories that exist for seniors, regardless of the fact that they are receiving feedback from family and friends that suggests that they should be slowing down. In fact, they are doing just the opposite by increasing daily activity.

Focus group members also provided some insight into another common theory known as ageism. Ageism is a damaging form of prejudice against individuals who are old in chronological age (Spirduso, 1995). Ageism occurs when society expects certain behaviours based primarily on chronological age. Ageism influences people to define their capabilities and roles and those of others based only on age. This occurred when members said others had told them they should be acting their age or when family members were no longer able to do things due to their age. Such people are likely unable to do things because they believe that this is what society expects of them. The following comment made by one of the focus group participants expresses the type of criticism focus group members often experienced:

"I hear people say, 'I'm 61 or 63 or something, I can't do those kinds of things'."

One focus group member identified a concept that is often covered when examining exercise and seniors. Numerous studies all conclude that

participating in physical activity and exercise increases muscular strength, flexibility, mobility, functional status, general fitness levels, functional capacity and has desirable effects on body weight (Paffenburger & Lee, 1996; Sharpe & Mconnell, 1992; Swoap et al., 1994; Wolinsky et al., 1995). Hales (1992) reiterates the words of the focus group member when he suggests that the losses previously associated with advancing age may not be a result of time passage, but of disuse. Therefore, it can be inferred that, just as inactivity accelerates aging, activity slows it down.

During the interviews, focus group members used words such as perfectionist, highly disciplined, and restless to describe themselves. They believed that such types of people are drawn to exercise due to the structure it provides in their daily lives. Also, for active seniors, activity is high on their list of daily personal priorities. Comments from members included:

"Scheduling time of exercise and planning to attend formal class proves that this is a lifestyle for me."

"I set the alarm to get up in the morning. Sometimes I'd rather stay home, perhaps having another cup of coffee with my husband but I'm committing to my health and fitness, so I come out."

"On the days I don't come to class I do an hour's exercise at home, doing similar exercises with my weights. I try to exercise at least five times per

week and walk as much as I can."

The above focus group comments are in keeping with the findings of the proponents of activity theory (Neugarten, Havinghurst & Tobin, 1968 cited in Novak, 1993). According to activity theory, as people lose social roles in advancing age, they remain happiest when they replace lost social roles with new roles. Active seniors who describe themselves as perfectionists and highly disciplined would be quick to replace lost roles due to decreased work loads or retirement. Further according to Neugarten et al. (1968 cited in Novak, 1993) active people can be divided into one of three categories, (a)reorganizers, (b)holding on, and (c)focused. The focus group participants' comments suggest that they would be classified as reorganizers. Reorganizers are generally very busy people who engage in new activities to fill in lost roles and activities. Comments from participants regarding their need for structure confirm the belief that they are reorganizers. Since the focus group participants represent a small and unique segment of the senior population, it can then be hypothesized that other active seniors are also likely reorganizers and will be filling in lost roles and activities with activity and exercise classes for the structure they provide. Such types of seniors would likely consider activity high on their list of daily priorities.

When seniors were asked if they were more active during different

seasons, all but one participant acknowledged being more active during the warmer seasons. Focus group members stated the following:

"I'm more active during spring, summer, and fall. In the wintertime you get a little more dormant. I still do a certain amount of exercise, but not as much as I do in the spring, summer, and fall."

"I'm busier during the warmer weather."

"I'm definitely more active during the summertime, spring, and fall."

Evidently, seniors are more active during the warmer months. This is thought to be true because they can get out of the home without a lot of thought and consideration. When cooler weather comes, seniors must pay greater attention to personal safety and transportation. Mills et al. (1997) realized that, for some seniors, attending exercise classes or exercising at a facility could be a deterrent. Therefore, they recommended that health promoters and those responsible for organizing fitness and exercise programs for older adults should encourage and provide resources for those who prefer individual activities or cannot attend classes outside of the home. This type of information would also be extremely useful for those active seniors who find themselves less able to exercise in the cooler weather, particularly those seniors who live in southern Ontario and have to deal with this type of climate.

From the focus group members responses, a number of interesting points emerged that must also be characterized as predisposing factors. Active seniors recognized that being in good health requires a level or degree of personal responsibility. Additionally, active seniors are motivated to exercise daily because of their health. Being in good health is very important to active seniors. Typical responses from focus group members regarding their health consisted of:

"Exercise is part of a whole way of living that gives you a better quality of health."

"You have to make a deliberate effort to exercise because your health is so important."

"During a rather stressful time, my blood pressure, which has always been normal, went very high. I was informed that I would be on blood pressure medication form the rest of my life. I said, 'I don't think so.' I increased my activity level gradually and now, 2 years later, my blood pressure is normal or below normal at all times."

"To do the things I want to do, I must be fit."

"I refuse to take medication for my arthritis. I just exercise and rest, that's my medications for arthritis."

Throughout the course of the interviews it was apparent that these

active seniors were aware of the positive physical and psychological benefits of exercise. Their statements indicated that being in good physical health was a personal commitment to self that focus group participants were willing to make. As researchers Bokovoy and Blair found in 1994, with regular physical activity and exercise, health and physical fitness levels are maintained and measurable increases have been noted. Further, Bokovoy and Blair and Sharpe and Mconnell (1992) also state that participation in physical activity reduces systolic and diastolic blood pressure, an occurrence that one focus group member personally experienced. Incidences such as high blood pressure and other health-related illnesses are explored in greater detail later in the discussion on the predisposing factors.

One of the most engaging points that emerged from the analysis of the focus group transcripts is that, although all seniors described themselves as active during childhood and adult years, a specific incident occurred that required that they treat activity and exercise as a greater priority. For the majority of active seniors, their deliberate effort to exercise resulted from specific incidents such as an irregular heartbeat, back pain, stroke, hip pain, osteoporosis, high blood pressure, high cholesterol and arthritis. Focus group members shared experiences such as the following:

"I got into trouble a couple of years ago where muscles were too limp to

handle the stress I was putting on them so I ended up at a chiropractor. I knew if I had been exercising those muscles more consistently I would have been in shape and been able to handle what I was doing. That experience was a pretty hefty incentive so I guess that was my warning."

"I started having back trouble a few years ago. Whenever I did anything I'd feel this lower back pain and now doing this exercise, especially the stretching the muscles, I don't have any trouble with my back at all."

"I did it [deliberate exercise] because I started to put on weight . and once I got started , this was over 20 years ago, I haven't stopped."

"I had a TIA [transient ischemic attack] about, oh, in '93 and since I haven't had any recurring strokes and I feel that the exercise helps."

A detailed literature search was unable to find reference to the occurrence of exercise adherence amongst seniors due to a negative health problem. Therefore, I would propose that theories of aging consider the importance of specific incidents. A specific incident is a major factor in determining exercise adherence. Clearly, for seniors who have had positive experiences in childhood and who would characterize themselves as active during their adult years, the occurrene of a negative health problem immediately motivates them to follow a more formal or deliberate exercise program. These seniors are unique as they do not lack the confidence to join

classes or go to a gym. I would suggest that this is a direct result of their personal comfort level with fitness and activity that originated in childhood. Such seniors also recognize that being active was always an important part of their lives. Therefore, if they want to maintain a high quality of life, more deliberate effort is required. This is not to suggest that any senior who experiences a health problem will recognize that daily activity and fitness will improve or make the condition more bearable. Rather, those with positive experiences in childhood and during their adult years will have a greater comfort level with fitness and activity that allows them to attempt to rectify the problem. A critical incident only serves as a reminder as to how important activity is to one's life and sense of well-being.

Enabling Factors

Focus group members identified that physical activity in elementary school was compulsory. However, formally organized extracurricular activities were not available to all participants as children. Focus group members made statements such as:

"Sports and activities originated at the school."

"You could not opt out of participation in physical activity at school. There was no choice. We participated in field hockey, swimming, basketball, and gymnastics. You had to participate every week."

"At school we had lots of activity. We had gymnastics, basketball, all sports. I don't think they were properly instructed, but they existed."

"We had gym class every day from elementary school on."

"In our school it was absolutely mandatory."

Comments like the above from the focus group participants indicate that as children they were exposed to daily physical activity. Nothing in the literature regarding active seniors indicates that being active as a child is a prerequisite for being an active senior. It is worth noting that all the participants of the focus group were chosen to participate in the study because they were in fact active. This characteristic made them ideal candidates for this study. Additionally, it also seems that all these active seniors had similar experiences at elementary school. When focus group members were in elementary school, physical activity was compulsory. Perhaps compulsory physical activity could be considered a factor that enhanced focus group members' comfort level with activity in their senior years or led directly to lifelong involvement in physical activity.

Active seniors admitted to being more willing to be pushed by a senior-aged instructor than a 20-or 30 year-old instructor. Active seniors claimed to be motivated by an active senior instructor. They believe if a member of their peer group can do something, then so can they. They also

claimed to have a better rapport with someone their own age whom they perceive to have a similar mentality. Responses from participants regarding fitness instructors and class composition included:

"It is a deterent when you're in a class with a bunch of 30 year-olds."

"I was in a class with an instructor who was in her 30s and that class was too fast for me."

"I think that the younger instructors, even though they can evaluate what a senior can do, the instructor is not on the same plane as the exercisers."

"I'm more willing to let the instructor (a senior) push when I know she's older than I am than I would let someone who is 20 years younger."

The literature available on exercise adherence for seniors tends to focus on determinants or constraints that prevent people from participating in activity. Of the constraints identified pertaining to older adults, the age and type of fitness instructor was not a topic identified in the literature studied. This study has therefore uncovered a valid point to consider when planning and/or organizing fitness programs for seniors. Clearly, based on the responses of this focus group, seniors who choose to attend fitness classes prefer an instructor of similar age. Focus group participants perceive that the older instructors will be better able to evaluate other seniors' capabilities and possess a similar mentality.

When questioned about daily activities, focus group members claimed to participate in a variety of physical activities on a daily basis, such as walking, swimming, biking, hiking, skiing, and yoga, due to the enjoyment such activities provide. The activities that the seniors participate in have some common characteristics. Activities can be done alone, are inexpensive, flexible, in the sense that they are adaptable to changing seasons and needs, and require little equipment. Active seniors participate in a variety of activities in a variety of places. Their desire to exercise is not confined to their exercise class at Brock. Typical answers from active seniors regarding their daily activities included:

"I also belong to aquafit. I go three times a week so I combine my exercise class with aquafit."

"I do line dancing."

"I have a stationary bike I use. I come to exercise class. I'm a widow and I do all my own gardening and the house myself."

"I do a lot of walking. I have a bicycle and spend two or three times a week on that. I lift weights once or twice a week."

"I also swim."

"I do hiking in the gorge."

The statements derived from the focus group members are in agreement

with existing literature on exercise adherence. Mills et al. (1997) suggest that older adults are more likely to maintain or engage in physical activity if they participate in activities they enjoy. Also, Mills et al. found that older adults preferred activities they could do individually or at home, which the focus group members' responses reflect.

During the course of the interviews, most of the focus group members acknowledged that friends initially invited them to join their current programs. Typical responses from members regarding the friendship and social interactions from exercise included:

"Jill invited me to come and I mentioned it to my sister and invited her to come. Then I ran into a girl when I was walking that I haven't seen for a number of years. We chatted and she asked if I exercised and I told her yes and about the class we're in and her eyes kind of lit up so I invited her."

"I think it's important to invite people to come and some people need an invitation. They need someone to bring them, they just don't come on their own."

"I talk to many of my friends, mostly males who are maybe more obese than I am, and I try to convince them to join."

"Well, in the beginning it was because my daughters were doing aerobics so I joined them."

"I've invited people to come to the class."

"I really didn't think I was going to get a yes, but I did. 'Yeah', he said, 'why don't I give it a try.'"

An examination of the literature did uncover the importance of social interactions with peers as a criteria for adherence. Smith and Storandt (1997) examined 246 seniors and classified them as either a competitor, noncompetitor, or a nonexerciser. Participants completed a questionnaire which assisted in classifying them. Responses from the competitors revealed that one of the reasons they exercise is to be with friends. This finding by Smith and Storandt regarding the social aspects of participating in physical activity is echoed by the focus group participants. Focus group members acknowledge that a friend initially invited them to join their current program. Therefore, one can also assume that being with friends is a motivational factor for active seniors.

When focus group members were asked how other nonactive seniors could be encouraged to begin exercising they revealed that structured classes are extremely important. For focus group members, structured classes have been vitally important to their success in adhering to exercise. In fact, for active seniors, organized fitness classes have provided structure to their day and that has been key to their success in committing to exercise. Active

seniors made the following statements:

"It's a matter of setting priorities, if people really want to do it, you'll make time. If you're half-hearted about it then. "

"Once you start doing it [exercise classes] again you realize, the day had gone by and I've done so much."

"Even to set the alarm, to get up in the morning and come out. It gets you going."

"I would tell them [nonactive seniors] to do something structured. Because structure is key."

The statements from the focus group members all identify the extremely important role structured classes have played in their success in committing to exercise. The focus groups' responses prove what researchers Neugarten, Havinghurst, and Tobin (1968 cited in Novak, 1993) found when they proposed activity theory. Participants of the focus group are examples of individuals classified as reorganizers by Neugarten et al. Reorganizers are adults who remain happiest because they replace lost social roles with new roles. Being a participant in a class would be an example of a new role for many active seniors.

Interestingly, the importance of structure was not identified as an exercise adherence factor. In fact, according to the exercise adherence

literature, structured classes were considered a deterrent. This finding was likely produced because researchers were generating data from seniors who lack the motivation to participate in exercise. Based on the findings of this study, it could be proposed that active seniors have not been questioned about their motives for exercise. If this is the case, much of the research about seniors should be reexamined as it may be hypothetical and based on researchers' projections about problems pertaining to seniors and exercise. The ideas and insights shared by the focus group members during the focus group interviews are examples of lived experiences versus projections. Contrary to the exercise adherence literature, according to the focus group members, structured exercise classes are vital if seniors are to remain committed to daily exercise.

Reinforcing Factors

When focus group members were asked why they began exercising, they identified that the deliberate effort to exercise resulted from specific incidents such as an irregular heartbeat, back pain, stroke, hip pain, osteoporosis, high blood pressure, high cholesterol, and arthritis. Focus group members made statements such as:

"I starting having back trouble about 12 or 13 years ago and I have arthritis. It is in my spine and when I do anything I feel this lower back pain and now doing this exercise program I don't have any trouble with my back."

"Two years ago I was having some problems with high blood cholesterol and blood pressure so knowing the benefits of exercise was an incentive."

"I had some osteoarthritis and I find I'm a lot better since I started [exercise]."

"I developed an irregular heartbeat and the doctor wanted to put me on medications and I didn't want to do that. I read up on books and it said exercise, so I swam every day."

As previously mentioned, a detailed literature search was unable to find reference to the occurrence of exercise adherence amongst seniors due to the onset of negative health problems. For members of the focus group negative, health problems gave participants the motivation to continue to exercise because they witnessed immediate improvements in their health or did not want to let themselves decline again. Again, it is felt that the findings of this focus group indicate that theories of aging need to consider the importance of specific incidents. Specific incidents such as the occurrence of a serious health problem clearly motivate some seniors to make a more deliberate effort to exercise.

When focus group members were asked if they considered themselves more healthy than others their age, all members regarded themselves as more healthy than their peers. They believed this to be true because they had less

incidence of illness. Responses from the participants included:

"Because of exercise I can do more things than they [friends] can do."

"I can do things younger people can't. I think I am in good health in comparison to some others."

"Well I know some people, a few years older, friends of mine, couldn't do anything, it's crazy."

"I think I am in better shape than some of my friends."

"Comparing with my friends I think I am more active. I do more things. I have had my problems but I don't live on pills. I think it is terrible, elderly people getting too many pills."

"Absolutely, I talk to people who are younger than I am and they're, 'I've got this pain and that pain.'"

"I think I am [healthier than peers] when I go to the doctor I say I'm not on any medication. I never have been, but a lot of people our age have numerous pills that they take to keep going."

The members of the focus group perceive themselves to be of better health than their peers. It is difficult to support these beliefs with literature, but the literature does tell us that there are both physiological and psychological benefits derived from exercise. Members of the focus group do identify many of the physiological and psychological benefits by claiming they

can do more than others their age. To be able to do more than their peers, logically, focus group members have above average muscle strength and endurance. As the researcher Hales (1992) found, losses previously associated with advancing age may not be a result of the passage of time, but of disuse.

During the process of the focus group interviews, it became apparent that focus group members are motivated to exercise for the physical, psychological, and social benefits it provides. Additionally, all active seniors experience positive benefits, both physical and psychological in origin, from daily activity. Typical responses from the participants included:

"It improves your mental and physical abilities, it lowers your stress level, it makes you feel better about yourself, and you don't concentrate on age."

"[I have] more energy, better sleep, better appetite, all around physical good feeling, better movement, better balance."

"I had a TIA in '93 and since then I haven't had any reoccurring strokes and I feel that exercise helps. My legs are stronger and I have had problems with my knees and that has improved."

"I have an tendency to have depression and I found even when I was depressed and I came here to class it gave me a lift."

"It's very nice to come into a group of people and be able to say hi,

hello, and it's a very important part of it."

Physiological and psychological benefits have been previously identified and described in detail. The responses from the participants and the detailed literature review revealed that there are numerous physiological and psychological benefits that can be obtained from exercise for seniors. One participant described the lift she obtained from attending the class when she was suffering from depression. This feeling is not unique to this individual. Researchers Bokovoy and Blair (1994) found that there is a widespread belief amongst researchers and health care practitioners that the incidence of depression is significantly reduced amongst seniors who engage in regular exercise. When summarizing the benefits of exercise for seniors it is fair to say that no single group can benefit more from exercise than the elderly, and comments from the focus group reinforce this belief.

Focus group members disclosed that participating in exercise allows them to do what they want to do, for example: ride bikes, take hikes, swim, garden, clean their own homes, and enjoy being active with their grandchildren. Focus group members made comments such as:

"The things that I want to do, I have to be fit to do them."

"My daughter is 36 and I'm 77 and I better keep on the go to keep up with the kids."

"I just don't want to fall apart as I get older. I've seen so many other people that it has happened to."

"I'm going to do lots of gardening, cutting my own grass even."

"I think that's my reason [health and fitness], and to keep my muscles working so that they don't get too weak to lift things."

"I'm motivated to do this [exercise] because I enjoy it."

"I feel that I can undertake things that probably I hadn't before."

Members of the focus group identified the various activities they do, and recognize that exercise allows them to do the types of things they want to do. This finding is supported in the literature by Mills et al. (1997) in their research on exercise adherence. Mills et al. found that older adults are more likely to maintain or engage in physical activities they enjoy to maintain their interests.

During the course of the interviews, the active seniors described how the importance of daily exercise has expanded or carried over into other areas of their lives. For example, active seniors maintained that they are very aware of what they eat on a daily basis and consequently they avoid certain foods. Focus group members shared the following insights:

"This sense of well-being and energy [from exercise] carries over into life and we carry it out into our families, to our communities."

"I'm there for myself, I'll be very honest about it. It's my body, it's my health."

"The exercise is part of a whole way of living that gives you better quality of health."

"I find that after I started exercising, it expanded into other areas of my life, like I became aware of what I ate and what I drank. So it has been a whole revolution in my own lifestyle. It's great."

Focus group members associate the additional benefit of health consciousness with participating in exercise. Health consciousness can be described as the heightened awareness of what a person eats accompanied by a deliberate effort to engage in daily exercise. Both endeavours are pursued because the individual takes responsibility for their level of health and wellness. Focus group members have found that committing to an exercise program has had positive implications for them and has in fact changed them. This change is manifested in heightened awareness of the importance of health. Therefore, currently active seniors not only have the noted physiological and psychological benefits of exercise but they also have the additional benefit of becoming health conscious.

During the focus group interviews, an interesting belief of the participants was uncovered. It seems active seniors profess that they feel

young due to exercise. They do not feel their chronological age. Typical comments regarding age included:

"One thing that's probably common to us all, we don't consider ourselves seniors anyway."

"I can do things younger people can't."

"I have found people who are younger than myself decline. If you don't use it, you lose it."

"I just turned senior but I feel like I'm still young."

This feeling or belief by the focus group members that they do not feel their chronological age is also very difficult to back up with literature. This finding is based on the focus group members' responses to questions and their belief that they do not feel like a senior. Therefore, participating in exercise results in seniors demonstrating an enhanced comfort level with their age and in fact, they feel younger than their chronological age.

Finally, the last reinforcing factor that emerged from the focus group interviews was that active seniors all agreed that exercise does not lengthen life span. Participants did not think that because they attend classes daily that they are guaranteed a longer life. Focus group members made the following statements:

"Exercise doesn't guarantee a longer life. It only adds to quality."

"Death has no calling card."

"It's not until you get older and you don't move as you used to, this is when I found it was beneficial to exercise."

Both directly and indirectly, focus group members recognize that exercise is improving their quality of life. They know that exercise is not going to guarantee them anything, but it is providing them with improved quality of life in the present. The notion of improved life quality was uncovered in the literature review in the section devoted to physiological benefits. Paffenbarger and Lee, (1996), Sharpe and Mconnell, (1992), Swoap et al. (1994), and Wolinsky et al. (1995) all agree that participation in physical activity and exercise increases muscular strength, flexibility, mobility, functional status, general fitness levels, functional capacity, and has desirable effects of body weight. In short, exercise improves quality of life.

Barriers or Challenges to Health Decisions

This category was created because a number of the themes that emerged from the focus group interviews could not be categorized according to the Influences on Personal Behaviour-Change Decisions Model (Donatelle & Davis, 1996). The remaining themes were all specific factors that prevent seniors from exercising. Hence, they were then referred to as barriers or challenges to health decisions and behaviours. The following barriers or

challenges reflect the perceptions of the focus group members, and therefore do not reflect the barriers to health decisions and behaviours of all seniors. Additionally, it is difficult to back up the findings from the focus group members regarding challenges or barriers. This is likely because the majority of literature on this topic focuses primarily on exercise adherence and strategies to overcome the barriers to exercise. The findings of the focus group interviews are based on the participants' perceptions of what prevents their peer group from exercising.

Focus group members revealed that during their early to midadult years, when their children were young, many currently active seniors did not have the opportunity to attend formal exercise programs. They believed they were too busy working and caring for their young children. Interestingly, many were too busy to pursue their own fitness and exercise needs as they were coaching or driving their own children to various sporting activities. Focus group members made statements such as:

"For me it was a time factor, when I was working I did a great deal of travelling and there just wasn't time to do anything formal. Now that I'm retired I have the time to do the kinds of things I would ordinarily have done earlier had I had the time."

"Working full time as a nurse 3 to 11, I had three young children in the

home and I just found it impossible to set aside time for myself to exercise."

"After I got married when I had the children it was just impossible for me to go anywhere to exercise because my husband worked shift work and my children were in sports so I was a taxi."

"Well, with little kids, trying to keep the house in decent repair and everything, it's just impossible to find time."

Active seniors also disclosed that in their opinion if people sat along the sidelines as children, they became comfortable there, and that is where they have remained throughout their lives. Focus group members made the following statements about activity.

"Others can't fathom the benefits of this [exercise] program, unless they grew up with it, unless they participated in sports from when they were a child."

"I was raised healthy and I assume that exercise is just a natural combination of that type of rearing."

"I felt sorry for girls who didn't participate or who didn't want to for one reason or another, I really felt they were missing out."

"I find that a lot of the other friends of mine [nonactive friends] were never involved in sports at a younger age. They sat from that time until present. Whereas if you're active in sports during youth it gives you the

initiative to keep going throughout life."

Focus group members also discussed the importance of the appropriate music, instructor, and exercise program for seniors. They believe that loud music, high impact movements, and young instructors were deterrents to older adults who attempted to participate in such classes. Participants made the following statements about this topic.

"I think what deters a lot of people is those high-impact aerobics that are really fast, up and down."

"I participated [aerobics class] and it really was not suitable for seniors. They jump forwards, backwards, sideways, they jump sideways with long steps. It was downright dangerous."

"Yes [it's deterring] if you're in with a bunch of 30-year-olds".

Active seniors also had some opinions about young fitness instructors. Focus group members considered young fitness instructors as knowledgable but thought that such instructors could not empathize with seniors because they were not seniors themselves. Focus group members made the following statements during the course of the interviews.

"I think that younger instructors, even though they can evaluate what a senior can do the instructor is not on the same plane as the exercisers."

"I'd be more willing to let the instructor push me when I know she's 20

years older than I am than I would let someone who is 20 years younger."

"We need qualified, really qualified instructors for the age group."

Focus group members also theorize that a younger instructor cannot identify with a senior's abilities. Focus group members made the following statements about younger instructors.

"I went to [an exercise class]. I went three times and of course the young lady's putting it on and of course she's slim and trim and I recall coming home and my wife saying, 'Hey are you getting a coronary?'"

"I'll listen to her [younger instructor] and apply to my body. If my body says I can't do it, then there's no way I can do it."

"I been in classes where the instructor was a lot younger, all the participants were all young. I was the oldest and I've been told, you're an inspiration. I say thank-you, I think."

Focus group members also had some interesting insights about their peer group. Focus group members suspect that the fear of trying new things and the leaving of one's comfort zone prevents many of their peers from participating in formal exercise programs. The focus group members had the following things to say about their inactive peers.

"They don't want to change, I think, especially the ones at this age. They don't want to try anything new. They are comfortable as they are."

"For some people, that's too much of an effort. It's the discipline and that's what people lack."

"People have the damnedest excuses."

"I think it's fear in a lot of people."

"Just afraid to start, they're self-conscious and they know they're not going to be able to do as well as some people who have been doing it for a couple of years so they don't start."

"A lot of people don't want to commit either."

The final barrier or challenge to health decisions and behaviours for seniors is that regarding useful information. Focus group members believe that to get other inactive seniors exercising, more information needs to be available to them about the beneficial effects of exercise. They suggest that doctors should be doing a better job of promoting activity as an option for improving health and feelings of wellness. Participants of the focus groups revealed their feelings on this matter in the following statements.

"I think one of the difficulties is the mind set around the inevitability of growing old and I really feel the medical profession, somehow we should persuade the medical profession to have a different approach to it. I have a super doctor right now, the last check-up I had which was a couple of weeks ago, he said I was in better shape than he was. But what they said to me when

they heard about my lifestyle, you should speak to some of our other patients."

"None of the them [doctors] have ever said to me, what exercise are taking or you should be, never."

"I think [to encourage others] it needs that human perspective to it in order to encourage others, just reading it in a flyer is probably not going to motivate many people but sharing with people, and inviting them and then its up to them."

"They have to see it [the classes and benefits], not read it, but to see it."

CHAPTER FIVE: RECOMMENDATIONS AND CONCLUSIONS

Recommendations

Based on the discussions and insights shared during the focus group interviews some ideas emerged that were unique to the study. From this study nine recommendations have been generated. These recommendations are targeted at health professionals, fitness leaders, community programmers, educators, and anyone who works with seniors to assist them in enhancing their quality of life.

Recommendation Number One

Physical activity should remain part of the elementary and high school curriculum. Students should be active on a daily basis because activity in youth and adolescence predisposes individuals to remain active throughout their lives.

Recommendations Number Two

Contrary to the current literature, seniors like structured exercise programs. Such programs assist seniors in planning their day and ensuring that daily exercise is achieved. Thus, in communities the number of structured activity classes should increase steadily in the next few years as the portion of the population that is seniors increases.

Recommendation Number Three

Active seniors respond better to like-aged instructors. Thus, more senior instructors must be hired in facilities that provide programs. Focus group members believe that more opportunities need to exist to train senior-aged instructors. Such instructors must be adequately trained, as focus group members expressed that there is a need for really well-qualified instructors.

Recommendation Number Four

Medical professions need to be more diligent about promoting activity to seniors. Active seniors feel that health professionals need to do a better job promoting exercise as an option for improving quality of life in senior years. If medical professionals actively prescribed exercise, it is felt more seniors would have a better quality of life.

Recommendation Number Five

Nonactive seniors need access to testimonies from active seniors about the benefits of exercise, how they feel following exercise, and how exercise has improved their quality of life. Reading information about the benefits of exercise in magazines or newspapers is not motivational for seniors. By providing first-hand testimonies, the number of seniors who participate in regular activity is likely to increase.

Recommendation Number Six

Contrary to the literature, seniors do not prefer solitary activities. Hence, the opportunity for group activity for seniors needs to increase. Seniors enjoy the interaction group exercise provides. In fact, instructors should encourage participants to invite friends and neighbours to classes. Seniors should also be encouraged to socialize in classes, to assist in making transportation arrangements, and provide motivation and encouragement to others. By doing these simple things, fitness will continue to exist beyond daily structured classes and overflow into other areas of seniors' lives.

Recommendation Number Seven

Senior centres need to start providing daily quality exercise programs at varying times, at a variety of levels (beginner, intermediate, and advanced) to seniors in their communities. Activity must be encouraged and promoted in facilities which seniors already frequent. Since a high number of seniors inhabit these centres, activity must be encouraged and promoted on site.

Recommendation Number Eight

Senior-aged men should be encouraged to attend structured fitness classes. There is a perception that fitness classes are for women. Indeed, most of the participants in the focus groups were female. However, from the results, it is clear that participants felt that activities should be gender neutral,

appealing therefore to all seniors, not just females.

Recommendation Number Nine

The cost for any structured fitness activity or access to any fitness facility should be substantially reduced for seniors. Many seniors are on a fixed budget and would consider the expense of a class or cost of a membership to a facility as excessive or frivolous. A reduced fee policy across Canada conveys to seniors that they should take personal responsibility for their health. It is likely that such a program would contribute to reduced health care costs for seniors. Such a program should be sponsored by Health Canada.

Conclusions

The information gathered from the focus groups has tremendous relevance for those who currently work in the planning of elementary or high school curriculums. Recognizing that the education system in Ontario is currently in the process of enormous overhaul indicates that the findings of this study could and should be considered in the changes to school curriculum.

The findings of the focus group study also have great relevance for anyone who works with seniors to enhance their quality of life. Such individuals include health professionals, fitness leaders, community programmers, employees of seniors centres, and any employees of a fitness facility. Conclusions from the focus group interviews are presented in two

sections. The first section examines the study's conclusions and findings about seniors. The second section examines the educational implications of the study and its impact on the educational system in Ontario.

Seniors

The seniors in this study were eager to share their insights on why they began exercising and how they continue to exercise regularly in later life. The seniors recognized that theories of aging exist, and they feel negative perceptions regarding aging need to be dispelled. This group cared about their health and wellness and considered it their personal responsibility to care for themselves. In their opinion, they were often discriminated against by others because they did activities they wanted, rather than the activities that others expected a senior to do. They produced a number of recommendations that would assist those attempting to better meet seniors' exercise needs. These recommendations were previously stated in this chapter.

Contrary to any other materials on seniors' exercise habits, focus group members enjoy structured exercise classes. They found structured exercise classes crucial to their commitment to exercise. The structure of classes became the central event of their day, and all other activities were organized around the exercise class. Therefore, activity classes became the means for time management and, for some, a way of coping with free time.

Additionally, it was found that seniors were very biased towards younger instructors. No one (not even one member) had a complimentary thing to say about a young-aged fitness instructor. The focus group members believed that younger instructors were not knowledgable about seniors' fitness capabilities. Focus group members discussed dangerous experiences they had witnessed while participating in such classes. They also found younger instructors' music selection to be inappropriate. It was felt that, regardless of what a young-aged instructor would do with seniors in an exercise class, biased feelings would exist and the participants would not achieve to their full potential. Therefore, based on the comments of the participants in this study, I would not recommend that a younger instructor lead a group of seniors in an exercise class.

To fill the place of young fitness instructors, it is recommended that seniors be encouraged to take senior fitness leadership courses. Such a course needs to be developed and could be initiated in an adult education setting. Upon completion of such a course, the participant, ideally a senior, would be qualified to teach a senior-aged fitness class. By increasing the number of senior-aged fitness instructors, the number of senior-aged participants in exercise classes may increase.

Educational Implications

Focus group members explained that they had structured activity through their schools as children and adolescents. The concept of structured activity originated from school experiences during focus group members' youth, and this is perhaps the reason why structured activity proves to be so successful for seniors. In fact, the daily activity experienced through the school setting taught the seniors the necessity and benefits of daily participation in exercise. They believe that this positive introduction to daily activity has directly influenced their lifelong involvement in exercise. Additionally, for all focus group members, all exercise and extracurricular activities originated in the school setting. At that time there were no community-based programs.

The participants in the focus group interviews came from very diversified backgrounds, with varying educational levels and levels of disposable income. The one identifiable thing the participants had in common was their early positive exposure to exercise. Based on discussions with the focus group members, it can be concluded that this single event has led directly to daily participation in exercise throughout their lives. Hence, daily exercise opportunities need to be offered to all students in school if lifelong involvement in activity is to be nurtured and developed.

Unfortunately, the present thrust in education is technology driven. Embracing technology in the classroom and throughout schools has negatively influenced involvement in exercise for students. Students no longer organize games during recess or play pick-up sports during lunch. Instead, they sit at a computer terminal cruising the Internet. Some students are said to accumulate more than 10 hours per week on the Internet and less than a half hour per week doing activity that would elevate their heart rate.

The disturbing fact about the above scenario is that it is becoming only too common. The government of Ontario has publicly announced that it fully endorses technology, and soon every classroom in Ontario will have Internet capabilities. It is proposed that if the government of Ontario would insist that every class in Ontario had daily activity and provided adequate equipment for students, students would be healthier and better able to succeed in technological fields. Comments from the focus group members have proven that increased time spent being active actually makes them feel like they have more energy. If this is true for seniors, I propose that it would be true for students. I am not calling for an abandonment of classroom activities and technology, but rather I feel that a half to a full hour of activity per day is going to enhance student academic success and, most importantly, improve their level of fitness.

As previously stated, this topic is of particular interest to me because I am a physical educator employed at the high school level in Ontario and want to inspire lifelong involvement in exercise for my students. I feel that physical education is not getting enough attention in Ontario. Students are required to obtain only one high school credit in physical education to graduate. For many students, this means that they participate in physical activity every day for one semester and may never take another physical education class again. Additionally, high school physical educators are often required to teach in other subject areas, as students are required to take only one physical education course. Hence, to give the teacher a full schedule, they often pick up subjects out of their expertise. Therefore, the physical education teacher, the promoter of physical activity, is too busy planning non-field-related subjects to supervise in the gym or organize extracurricular activities.

In elementary school, teachers are required to teach physical activity to their class, and many have no background preparation in the subject. Worse yet, some students have reported having their physical education classes taken away as a form of punishment for poor behaviour.

I feel that the job of the physical education teacher in the school needs to be changed to that of health promoter. As a health promoter they would not only teach physical education classes, but also, offer access to relevant

health materials such as stress management and nutrition behaviors. In fact, the health promoter could constantly be creating new and diversified fitness opportunities that would cater to every student of the school. This would lead directly to a healthier school environment and likely spread into the community. Reevaluating the physical education curriculum offered to students in Ontario and creating one that teaches students the tools necessary for lifelong involvement in exercise should be the goal of all educators in Ontario.

Finally, currently in Ontario, students are being denied access to extracurricular activities as teachers have withdrawn their services in opposition to the passing of Bill 160. In the most simplistic terms, Bill 160 requires that teachers spend additional time in the classroom. This has meant that many teachers are teaching an additional class of anywhere from 20 to 36 students. Therefore, teachers are responsible for delivering curriculum and evaluating another whole class. For many teachers, these additional responsibilities have made it virtually impossible to consider coaching and delivering other extracurricular activity oriented duties. This is one of the major reasons why teachers have withdrawn their extracurricular services. This current situation is particularly troublesome when one considers that all focus group members identified the school as the setting where regular physical

activity was taught. All focus group members attribute lifelong involvement in physical activity and exercise to their school experiences. If we deny students the opportunity to be active, then we are increasing the likelihood that the same group of individuals will be inactive when they are older. Increasing the potential that seniors of the future will be inactive means that we must be prepared to spend greater amounts of money on health care.

Research has shown the positive benefits of exercise. These findings were corroborated by the focus group members. Participants of the focus groups had access to daily activity during their childhood and adolescent years. This led directly to their lifelong involvement in exercise. Focus group members value their health and take responsibility for ensuring that they remain in good health through daily exercise and good nutrition. This group of individuals is less likely to be a burden on the health care system. Therefore, it seems logical that we should acknowledge what has worked well for this active group of seniors and begin ensuring that the same opportunities exist for today's youth. By increasing activity now, health care costs of the future will be reduced and students will have improved health.

In closing, from a simple research question driven by the desire to uncover the origins of exercise adherence in Canadian seniors, much has been learned. Based on the focus group interviews, the needs, wants and desires of

at least one group of seniors who participate in activity are now known. Strategies and techniques to motivate nonparticipating seniors have been proposed by their peer group which, if implemented, might lead to greater senior involvement in exercise. Finally, the focus group interviews have confirmed that early opportunities and positive experiences in physical activity derived at school directly influence an individual's lifelong involvement in activity and exercise.

References

Arbuckle, T., Gold, D., Chaikelson, J., & Lapidus, S. (1994). Measurement of activity in the elderly: The activity checklist. Canadian Jornal of Aging, 13(4),550-563.

Bokovoy, J., & Blair, S. (1994). Aging and exercise: A health perspective. Journal of Aging and Physical Activity, 2, 243-260.

Donatell4, D., & Davis, L. (1996). Access to health (4th ed.). Boston: Allyn & Bacon.

Godfey, C., & Feldman, M. (1984). The ageless exercise program. New York: McGraw-Hill.

Hales, D. (1992). An invitation to health (5th ed.). Don Mills: Benjamin Cummings.

Krueger, R. (1988). Focus groups: A practical guide for applied research. London: Sage.

Lee, I., & Paffenbarger, R. (1996). How much physical activity is optimal for health? Methodological considerations. Research Quarterly for Exercise and Sport, 67(2), 206-208.

McMillan, J., & Schumacher, S. (1993). Research in education: A conceptual introduction (3rd ed.). New York: Harper Collins.

Mills, K., Stewart, A., Sepsis, P., & King, A. (1997). Consideration of older adults preferences for format of physical activity. Journal of Aging and Physical Activity 5(1), 50-58.

Morgan, D. (1988). Focus groups as qualitative research. London: Sage.

Novak, M. (1993). Aging and society: A Canadian perspective (2nd ed.). Toronto: Nelson Canada.

Novak, M. (1994). Access to active living for seniors. Proceedings of the 10th commonwealth and internation scientific congress, 10-14 Aug. 1994. University of Victoria.

Paffenbarger, R., & Lee, I. (1996, September). Physical activity and fitness for health and longevity. Research Quarterly for Exercise and Sport.

Patton, M. (1990). Qualitative evaluation and research methods (2nd ed.). Newbury Park: Sage.

Sharpe, P., & MConnell, C. (1992). Exercise beliefs and behaviors among older employees: A health promotion trial. The Gerontologist, 32(4), 444-449.

Shephard, Roy. (1989). Physical activity and the aging (3rd ed.). London: Croom Helm.

Smith, C., & Storandt, M. (1997). Physical activity participation in older adults: A comparision of competitors, noncompetitors, and nonexercisers. Journal of Aging and Physical Activity 5(2), 98-110.

Spirduso, W. (1995). Physical dimensions of aging. Illinois: Human Kinetics.

Statistics Canada. (1997). Canadian statistics-population.
www.statcan.ca/english/Pgdb/people.htm

Statistics Canada. (1999). Canadian statistics-health.
www.statcan.ca/english/Pgdb/people.htm

Stewart, A., King, A., & Haskell, W. (1993). Endurance exercise and health-related quality of life in 50-65 year old adults. The Gerontologist, 33(4), 782-789.

Swoap, R., Norvell, N., Graves, J., & Pollock, M. (1994). High versus moderate intensity aerobic exercise in older adults: Physiological effects. Journal of Aging and Physical Activity, 2, 293-303.

Watts, P., Brockschmidt, B., Sisk, R., Baldwin, K., & McCubbin, J. (1997). Use of focus groups to determine the need for health promotion and wellness education services in rural communities. Journal of Health Education, 28(4), 249-252.

Whaley, D., & Ebbeck, V. (1997). Older adults constraints to participation in structured exercise classes. Journal of Aging and Physical Activity 5(3), 190-212.

Wolinsky, F., Stump, T., & Clark, D. (1995). Antecedents and consequences of physical activity and exercise among older adults. The Gerontologist, 35(4), 451-462.

Appendix A

Exercise Frequency by Age Group, by Sex, 1996-97

Select %, number of people, or return to the list of tables Back ▼ Submit

	1996–1997				
	Total[2]	Regularly	Occasionally	Rarely	Not stated
	number of people				
15 years and over	**23,444,124**	**13,385,504**	**4,345,165**	**5,058,398**	**655,057**
15–19 years	2,110,798	1,464,348	353,070	238,461	54,919
20–24 years	1,872,592	1,172,808	343,864	310,265	45,654
25–34 years	4,471,514	2,602,944	951,446	845,429	71,695
35–44 years	5,237,644	2,938,768	1,102,560	1,099,702	1,099,762
45–54 years	3,770,504	2,053,701	737,458	876,712	102,633
55–64 years	2,564,964	1,458,705	443,317	597,988	64,953
65 years and over	3,416,108	1,694,229	413,449	1,089,781	218,649
Men	11,519,428	6,450,094	2,235,138	2,413,777	420,419
15–19 years	1,085,999	792,765	163,923	95,715	–
20–24 years	948,260	585,784	162,115	162,555	–
25–34 years	2,208,852	1,221,607	493,791	450,973	42,481
35–44 years	2,644,862	1,406,169	626,072	550,340	62,282
45–54 years	1,921,647	975,580	400,344	467,888	77,835
55–64 years	1,231,133	688,290	210,896	290,844	41,104
65 years and over	1,478,675	779,900	177,997	395,463	125,314
Women	11,924,696	6,935,410	2,110,027	2,644,622	234,637
15–19 years	1,024,799	671,583	189,148	142,746	–
20–24 years	924,332	587,024	181,749	147,711	–
25–34 years	2,262,662	1,381,338	457,655	394,456	–
35–44 years	2,592,782	1,532,600	476,489	549,422	–
45–54 years	1,848,857	1,078,121	337,114	408,824	–
55–64 years	1,333,831	770,416	232,422	307,144	–
65 years and over	1,937,432	914,329	235,451	694,318	93,335

– nil or zero

1. Exercise includes vigorous activities such as calisthenics, jogging or racquet sports, team sports, dance classes or brisk walking for a period of at least 15 minutes.

2. Components may not add to total as frequency was not stated for up to 1% of respondents.

(Statistics Canada, 1999)

Appendix B

Population by Age and Sex, 1996

List of Tables

	1996					
	Both sexes	Male	Female	Both sexes	Male	Female
	number			% of total population		
All ages	29,963,631	14,845,013	15,118,618	100.0	100.0	100.0
0–4	1,960,862	1,005,906	954,956	6.54	6.78	6.32
5–9	2,015,826	1,031,303	984,523	6.73	6.95	6.51
10–14	2,019,552	1,031,869	987,683	6.74	6.95	6.53
15–19	2,002,858	1,026,310	976,548	6.68	6.91	6.46
20–24	2,036,326	1,033,470	1,002,856	6.80	6.96	6.63
25–29	2,223,536	1,121,457	1,102,079	7.42	7.55	7.29
30–34	2,631,235	1,334,035	1,297,200	8.78	8.99	8.58
35–39	2,666,380	1,343,878	1,322,502	8.90	9.05	8.75
40–44	2,387,502	1,191,790	1,195,712	7.97	8.03	7.91
45–49	2,159,498	1,084,776	1,074,722	7.21	7.31	7.11
50–54	1,672,200	838,231	833,969	5.58	5.65	5.52
55–59	1,332,586	661,929	670,657	4.45	4.46	4.44
60–64	1,213,101	596,190	616,911	4.05	4.02	4.08
65–69	1,129,255	536,197	593,058	3.77	3.61	3.92
70–74	979,902	432,814	547,088	3.27	2.92	3.62
75–79	704,329	289,212	415,117	2.35	1.95	2.75
80–84	467,611	174,877	292,734	1.561	1.178	1.94
85–89	240,606	78,278	162,328	0.803	0.527	1.074
90 and over	120,466	32,491	87,975	0.402	0.219	0.582

Source: Statistics Canada, CANSIM, Matrix 6367.

(Statistics Canada, 1997)

Appendix C

Population Projections by Age Group and Sex, 2001

	2001		
	Both sexes	Male	Female
	thousands		
All ages	31,877.3	15,781.2	16,096.1
0–4	1,924.3	988.2	936.2
5–9	2,082.2	1,069.0	1,013.1
10–14	2,124.8	1,089.2	1,035.6
15–19	2,124.5	1,088.0	1,036.4
20–24	2,115.2	1,080.1	1,035.0
25–29	2,177.7	1,103.0	1,074.7
30–34	2,366.4	1,192.9	1,173.4
35–39	2,723.4	1,376.1	1,347.3
40–44	2,716.3	1,363.9	1,352.3
45–49	2,399.6	1,193.9	1,205.7
50–54	2,140.1	1,069.8	1,070.3
55–59	1,651.4	820.1	831.3
60–64	1,300.9	636.8	664.0
65–69	1,154.0	554.2	599.7
70–74	1,027.1	470.6	556.6
75–79	831.9	345.9	486.1
80–84	541.8	201.3	340.5
85–89	308.5	98.3	210.2
90 and over	167.4	39.8	127.6

(Statistics Canada, 1997)

Appendix D

Population Projections by Age Group and Sex, 2006

	2006		
	Both sexes	Male	Female
	thousands		
All ages	33,677.5	16,674.3	17,003.2
0–4	1,924.6	988.4	936.2
5–9	2,016.0	1,035.9	980.1
10–14	2,170.1	1,115.0	1,055.2
15–19	2,213.7	1,135.8	1,078.0
20–24	2,242.9	1,144.3	1,098.6
25–29	2,265.9	1,151.5	1,114.5
30–34	2,328.3	1,177.5	1,150.8
35–39	2,479.5	1,248.0	1,231.5
40–44	2,782.9	1,403.0	1,379.8
45–49	2,734.2	1,370.2	1,363.9
50–54	2,391.1	1,185.4	1,205.7
55–59	2,113.8	1,048.2	1,065.7
60–64	1,615.3	791.5	823.7
65–69	1,244.6	597.0	647.6
70–74	1,054.0	490.0	564.1
75–79	877.1	380.4	496.7
80–84	644.0	244.1	399.9
85–89	361.0	116.4	244.6
90 and over	218.5	51.9	166.6

(Statistics Canada, 1997)

Appendix E

Population Projections by Age Group and Sex, 2011

	2011		
	Both sexes	Male	Female
	thousands		
All ages	35,420.3	17,541.8	17,878.5
0–4	1,980.1	1,017.0	963.1
5–9	2,016.6	1,036.4	980.3
10–14	2,104.8	1,082.3	1,022.5
15–19	2,259.2	1,161.6	1,097.6
20–24	2,332.3	1,192.2	1,140.1
25–29	2,392.8	1,215.3	1,177.5
30–34	2,416.1	1,225.8	1,190.3
35–39	2,443.0	1,233.4	1,209.6
40–44	2,544.5	1,278.2	1,266.2
45–49	2,801.9	1,410.1	1,391.8
50–54	2,722.0	1,359.6	1,362.4
55–59	2,362.2	1,162.6	1,199.6
60–64	2,063.6	1,011.0	1,052.6
65–69	1,544.5	742.8	801.7
70–74	1,142.5	531.6	610.8
75–79	906.1	400.1	506.0
80–84	685.0	272.9	412.1
85–89	433.2	143.7	289.5
90 and over	269.9	65.1	204.8

(Statistics Canada, 1997)

Appendix F

Population Projections by Age Group and Sex, 2016

	2016		
	Both sexes	Male	Female
	thousands		
All ages	**37,119.8**	**18,387.5**	**18,732.2**
0–4	2,052.8	1,054.4	998.4
5–9	2,072.2	1,065.0	1,007.2
10–14	2,105.7	1,082.9	1,022.8
15–19	2,194.8	1,129.5	1,065.4
20–24	2,378.2	1,218.3	1,159.9
25–29	2,482.2	1,263.3	1,218.9
30–34	2,541.4	1,288.9	1,252.5
35–39	2,530.4	1,281.5	1,248.9
40–44	2,509.9	1,264.8	1,245.1
45–49	2,569.5	1,289.1	1,280.4
50–54	2,791.4	1,400.6	1,390.8
55–59	2,688.7	1,334.1	1,354.5
60–64	2,308.2	1,123.7	1,184.5
65–69	1,971.6	949.4	1,022.2
70–74	1,420.6	664.2	756.4
75–79	989.8	439.0	550.7
80–84	714.1	291.2	422.9
85–89	466.5	164.4	302.0
90 and over	331.7	83.0	248.7

(Statistics Canada, 1997)

Appendix G

Letter of Consent to Participate in Focus Group Interviews

Brock University Department of Education
Informed Consent Form

Title of Study: "The Origins of Exercise Adherence in the Canadian Seniors Population"

Researcher: Ms. Karen Kilfeather
Faculty Advisor: Dr. Lorne Adams, Department of Physical Education
Phone #(905)688-5550 extension 3382
Name of Participant:_____

I understand that this study in which I have agreed to participate will involve the discussing of the benefits of exercise in my life. I am aware that I will be answering questions in a focus group with approximately 4 to 6 other participants. I realize that it is necessary for the researcher to audio-tape the interviews for analysis at a later date.

I understand that my participation in this study is voluntary and that I may withdraw from the study at any time and for any reason without penalty.

I understand that there is no obligation to answer any question\participate in any aspect of this project that I consider invasive.

I understand that all personal data will be kept strictly confidential and that all information will be coded so that my name is not associated with my answers. I understand that only the researcher's named above will have access to the data.

I understand that I am to be interviewed in a classroom at Brock University in an attempt to determine when I began exercising, why I began exercising, and the beneficial impact exercise has brought to my life.

I understand that the group interview will last approximately 1 to 1.5 hours and that the researcher, Ms. Kilfeather will contact me once in the months following the interview to present me with a summary of her findings, as required in focus group interviews.

I understand that Ms. Kilfeather is conducting these interviews to complete requirements for her Masters Thesis in Eduction.

Participant Signature_____ Date_____

If you have any questions about your participation in this study, you can contact me (karen kilfeather) at my home number 984-2567.

Thank-you for your help. Please take one copy of this form with you for further reference.

***

I have fully explained the procedures of this study to the above volunteer.
Researcher Signature_____ Date_____

Appendix H

Focus Group Interview Questions

1. At what stage in life did you begin exercising? (Childhood, adolescence, early adulthood, middle adulthood, late adulthood, last year, last six months)
2. Why did you begin exercising? (Doctor prescribed, friend encouraged you, individual decision, parent decision and encouragement)
3. Have you continued to exercise regularly or have there been periods when you have ceased to exercise regularly? If so, what was responsible for your absence from regular exercise?
4. Can you identify any benefits that you obtain or experience from participating in activity?
5. Do you think you possess characteristics or have had specific experiences that motivate you to follow an exercise regime in later life. (Partner is active, therefore, this is something to do together, experienced success as a child)
6. Do you consider yourself more active than others your age? Why or how do you know your are more active?
7. Do you consider yourself more healthy than others your age and why or how?
8. What do you think deters your fellow peers from participating in activity?
9. Do you think other seniors are deterred from exercising in formal classes as the majority of fitness instructors and particpants are non-seniors.
10. As I am really trying to uncover specifically why you are motivated to exercise, can you pinpoint precisely what motivates you to exercise?

11. Specifically, do you feel Better once you have finished exercising?
12. Do you believe your quality of life is improved due to participation in activity and how? (More active than others my age, few ailments, rarely ill, no mobility problems, good cholesterol levels, no osteoporosis)
13. As a child\teen did you participate in any formal organized activities? (Swimming lessons, soccer, hockey)
14. As a child\teen did you participate in physical activities at school and can you describe those experiences?
15. Did you have physical education classes at school?
16. Do you think your experiences in school physical education classes are responsible for your lifelong involvement in physical activity?
17. Describe the type of activities you typically participate in during the week?
18. Are you more active during certain seasons? (Summer, winter, spring, fall)
19. What advice would you give others to encourage them to maintain participating in regular activity?
20. How would you encourage other seniors to participate in regular exercise?
21. In your opinion, is there a shortage of fitness instructors who are knowledgable in instruction for seniors.

Appendix I

Letter of Acknowledgement

Brock University Department of Education
Informed Consent Form
Title of Study: "The Origins Of Exercise Adherence in the Canadian Seniors Population".

Researcher: Karen Kilfeather
Faculty Advisor: Dr. Lorne Adams, Department of Physical Education
Phone # (905)688-5550 extension 3382

Dear Focus Group Participant,

I realize a number of months have passed since I conducted our interviews. During this period of time, I attended a summer course at the University of Toronto to further my knowledge in the dimensions of physical activity. I have also spent the last few months transcribing our interviews, uncovering themes, comparing interviews and summarizing my findings. I am currently in the process of finishing my Master's Thesis.

Without your valuable contributions and reflections on the subject of seniors and physical activity, I would not be as close to finishing as I am. The interviews have yielded some very substantial information that those concerned about physical activity will find pertinent.

Enclosed is a summary of the focus group interview you participated in. The summary includes the major ideas put forth by the group during the interview. If you feel you contributed something extremely relevant that is not present please feel free to contact me and we can go over the transcriptions.

Again, I cannot thank-you enough for generously volunteering your time for a study that I believe to be so valuable.

Please sign and enclose the attached form in the self-addressed stamped envelope provided as promptly as possible.

Brock University Department of Education

Informed Consent Form

Title of Study: "The Origins of Exercise Adherence in the Canadian Seniors Population".

Researcher: Ms. Karen Kilfeather

Faculty Advisor: Dr. Lorne Adams, Department of Physical Education

Phone #(905)688-5550 extension 3382

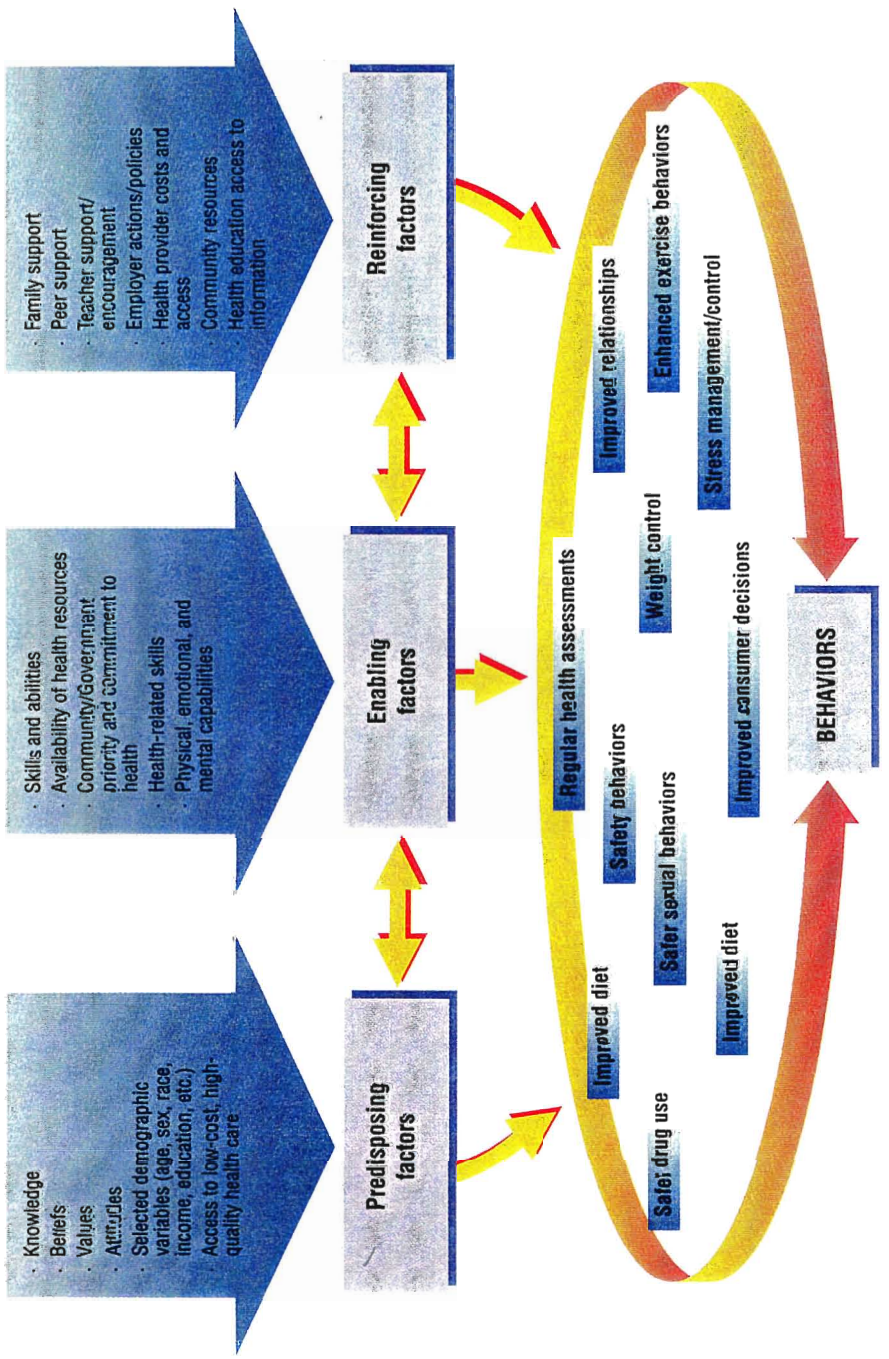
Name of Participant:_____

I acknowledge that I received and have read the summary of Ms. Karen Kilfeather's focus group interview, of which I was a willing participant. The summary includes the major themes that emerged from focus group interview that I attended as uncovered by Ms. Kilfeather. If any pertinent information that I contributed was not present in the summary, I have had the opportunity to contact Ms. Kilfeather to further discuss the summary of the focus group interview I attended.

Participant Signature_____Date_____

Appendix J

Influences on Personal Behaviour-Change Decisions Model



(Donatella & Davis, 1997)